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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR 1917/18-1931/32

THE YEAR ENDED JUNE 30, 1918

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THE UNITED STATES

BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an office of the Interior Department July 1, 1869.

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March 14, 1867, to March 15, 1870.

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August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

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July 8, 1911, to date.

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, October 15, 1918.

SIR: I have the honor to submit herewith, as required by law, the report of the Commissioner of Education for the fiscal year ended June 30, 1918.

This report consists of two parts: (1) A condensed statement of the activities of the Bureau of Education, and (2) a very brief interpretative survey of the progress of education in this and some other countries within the last two years.

A fuller statement of the work of the bureau is contained in the Annual Statement of the Commissioner of Education to the Secretary of the Interior, and a much more comprehensive account of educational progress in this and all other culture countries of the world will be given in the Biennial Survey of Education within the period 1916–18, to be published in two volumes early in the calendar year 1919.

The work of the Bureau of Education for the fiscal year 1918 might be more clearly stated under four heads:

1. Efforts to maintain the schools and all other agencies of education as nearly as possible at their normal efficiency during the war.

2. Cooperation with the Department of War, the Department of Labor, the Treasury Department, the Food Administration, the Council of National Defense, the Bureau of Public Information, and other governmental agencies in various forms of war work to be done through the schools or of special interest to school officers, teachers, and children.

3. The ordinary functions of the bureau in collecting and disseminating information in regard to education, advising State, county, city, and institutional educational officers, and assisting in the promotion of educational legislation and school improvement.

4. Studies necessary to the reconstruction or readjustment of education after the war.

In all these the bureau has done what it could with its limited means. As the end of the war approaches, studies for readjustment become relatively more important.

Because of the deliberation with which we entered the war and the very hearty cooperation of the Federal Government with State,

county, municipal, and institutional officers and the fine response of the people at large, our schools have suffered much less than the schools of most other countries engaged in the war. Very few schools were closed during the year. Full reports for the year are not yet in, but apparently there was a larger attendance in both the elementary schools and the high schools than in the last previous year, though the increase in attendance was less than the normal. The increase in enrollment in the elementary schools seems to have been approximately 1½ per cent, as against a normal increase of 2½ per cent; in the high schools, 2½ per cent, as against a normal increase of more than 9 per cent. Reports indicate that in boarding schools for boys and girls, in some parts of the country at least, attendance was much larger than usual. This was due, of course, to the fact that parents breaking up their homes because of war emergencies found it convenient to place their sons and daughters in schools in which they might have temporary homes. Attendance of women in normal schools, colleges, and universities was little less than the normal; in some cases it was much above the normal.

Immediately after our entrance into the war in April, 1917, young men in college began to volunteer for service in the Army, and the exodus was large. During the summer, fall, winter, and spring the demand for men and women of higher education and training for service in the Army, both at home and abroad, in the departments at Washington, and in the war industries, continue to increase and became so large that both students and instructors left the colleges, universities, and technical schools in large numbers. Before the end of the school year the attendance at these institutions was reduced 25 per cent or more. The exact figures will be given in the Biennial Survey.

Both students and teachers in schools of all kinds and grades have responded in the finest spirit of loyalty and patriotism to all the demands of the Government and have volunteered their services and hearty cooperation in every movement for the good of the country, for the welfare and comfort of our soldiers and sailors, and for the relief of suffering caused by the war both at home and abroad. No other class of our people has shown finer spirit. In this service the schools of all grades have justified themselves as democratic institutions and have won still more fully the confidence and support of the people.

In many places it has been found necessary to readjust the courses of study and school calendars to industrial needs. This has, however, been done always with the purpose of interfering as little as possible with the regular school work. Everywhere the people have manifested a desire to comply with the President's request that no boy or girl should have less opportunity for education because of

the war. The labor laws and school-attendance laws have been enforced in the interest of the children and the future welfare of the country. Our people have been willing to make all necessary sacrifices for the winning of the war, but they have not been willing to sacrifice the education of their children, nor have they believed it to be necessary.

The need for these readjustments and the demand for certain kinds of training to meet the war emergencies have served to call attention to certain weaknesses in our systems of education, which will no doubt be kept in mind during the period of readjustment upon which we are now entering. The experiences of other countries will also be enlightening. It is quite plain that we must include in our curricula more of the things that make for industrial efficiency and for physical health, but it will be still more important that we include those things that make for intelligent and virtuous citizenship in the period of reconstruction and in the new world of democracy and freedom in which our country must play a most important part. That there may be no duplication of effort and no loss of energy in the great task of education for individual development, industrial efficiency, social happiness, and civic and political welfare, there must be a better organization and closer coordination of all our agencies of education. School officers, legislators, and the people at large seem to be fully aware of this.

Schools in other countries actively engaged in the war have suffered much. Attendance in institutions of higher learning is only a small fraction of what it was before the war. In some of these countries at the beginning of the war the enforcement of child-labor laws and other laws pertaining to the welfare of the children were much relaxed. However, the people soon became aware of their mistake and have since done what they could to remedy it. The advice of all those who have gone abroad to study conditions during the war, as well as of those who have come to this country from the countries with which we are associated in the war, has been unanimous to the effect that we should not neglect the education and other interests of our children.

Reports from Germany during the first two or three years of the war seem to indicate that the schools of this country were maintained better than the schools of other European countries at war, but reports for the last year indicate that their schools have suffered much.

In all countries on either side education will no doubt receive much consideration in the period of reconstruction. Already England and some other countries have taken important steps. The Fisher bill, recently enacted into law in England, is very comprehensive and will be very carefully studied, no doubt, in all countries including our own. A full report of this act will be made by this bureau.

Studies now being made by this bureau and by other agencies in this country will, it is believed, be helpful not only to our own States in their work of educational reconstruction but to other countries as well.

Through the next decade the most important task in this and all other countries will be the building of systems of education which will give to all children full and equal opportunity for that kind and degree of education which will fit them for life and citizenship in the new world of freedom and democracy which will emerge out of the destruction of the old world of subjection and privilege. In this task the Bureau of Education of the United States should play a large part. To enable it to do this worthily and well it will need much larger support than it has ever yet had.

Respectfully submitted.

P. P. Claxton,
Commissioner.

The Secretary of the Interior.

REPORT OF THE COMMISSIONER OF EDUCATION.

I.

SOME ASPECTS OF EDUCATION IN THE UNITED STATES.

HIGHER EDUCATION.

HIGHER EDUCATION PRECEDING THE WAR.

The declaration of war on Germany by the United States, April 6, 1917, brought suddenly to a close an important epoch in the history of higher education. For more than a quarter of a century American colleges and universities have developed with a rapidity and freedom characteristic of American individualism. Within recent years the broad and liberal system of elective studies has reached the limits of its evolution, a reaction having already taken place as evidenced by the general adoption of the group system and other definite controls of elective subjects. The quantitative standards of both entrance and college requirements have been well defined and are now agreed to by nearly all degree-granting institutions.

One of the important problems in higher education just before the war concerned the improvement in the articulation of high school and college curricula. A number of leading colleges and universities have begun to develop a groundwork of prescribed studies which tend to weld the secondary school and college curriculum into more coherent relationship without losing the benefits of the elective system.

THE GROWTH OF THE SURVEY MOVEMENT.

Increasing interest has been shown in the study of administrative problems of higher education. The growing appreciation of the value of college education in the life of the people has led a number of States voluntarily to submit their higher educational institutions to expert criticism in order to determine their needs with more scientific precision. Such surveys in the past have been determining factors in improving the influence of colleges on the environment and

in bringing a more intelligent and helpful attitude of the general public to higher education.

Three States have recently conducted surveys of their State-endowed institutions of college grade under the supervision of the United States Commission of Education. The surveys of Nevada and Arizona were completed in 1916, being followed by South Dakota in 1917. A brief report of the Nevada survey has already appeared in Vol. I of the Commissioner's Report, 1917.[1] The reports of the Arizona and South Dakota surveys are in press.

Up to the present the bureau has stood for the principle of consolidation where practicable and it has also discouraged the separation of a college or other technical divisions from the main body of the university and to establish it at another place.

The adoption of the principle of major and services lines, where two or more colleges are unnecessarily duplicating courses, has also been emphasized.

THE SUPREME COURT SETS ASIDE THE HARVARD-TECHNOLOGY AGREEMENT.

In order to avoid the evils of excessive duplication of effort, Harvard University and Massachusetts Institute of Technology had maintained for nearly three years a successful scheme of cooperation. In the words of President Maclaurin, "the educational power both of the institute and the university has been greatly strengthened. Men taking institute courses have had the benefit of contact with eminent professors of the university, whose influence they would not otherwise have enjoyed, and men taking Harvard courses have similarly benefited by their association with professors of the institute. Unfortunately, however, the funds that the university has at its disposal for the promotion of the great science of engineering is almost wholly dependent upon the income from the Gordon McKay endowment, and the supreme court has decreed that this income can not be applied in the manner indicated in the agreement." The breaking of these relations is in the minds of leader educators one of serious moment, as the agreement was an act of unusual importance to the large constituency which supported these institutions.

PREPARATION FOR THE WAR.

While the normal problems of higher education were under discussion and solutions were being found, several discerning university authorities foresaw the inevitableness of America's entry into the world struggle and commenced to adapt their programs to meet the situation. Courses in military science and tactics were offered to those who looked forward to national service. As the crisis ap-

[1] For a complete report of the Nevada survey, see Bulletin, 1917, No. 19.

proached, the patriotic impulses of all colleges and universities were greatly increased.

THE IMMEDIATE EFFECTS OF THE WAR.

Scarcely had Congress voted for war when a large proportion of the senior students all over the country immediately offered their services to the Nation, sacrificing academic honors for those of greater moment. College authorities not only encouraged enlistments, but duly rewarded those men who had gone into service, granting them their diplomas on the basis of their records up to the time of leaving college. Many college professors and instructors volunteered for service also.

Students not only enlisted in the Army and Navy, but also entered the ranks of agricultural and war industries. Nearly 200 institutions granted leave of absence to faculty members for the period of the war.

Unfortunately, in the anxiety and rush to get into immediate action, many men capable of higher forms of service were doing duty where others less qualified could have done the work. In a measure this country was about to repeat the serious mistake of the allies in Europe, which had allowed their colleges to be decimated. The shortage of officer material and technically trained students has been keenly felt in England, France, and Canada.

EFFORTS AT POLICY FORMING.

About the time of the outbreak of hostilities Columbia University had prepared a valuable service blank in order to determine with accuracy its available resources in the faculty, graduates, and students. The Bureau of Education reprinted this blank and distributed it to the colleges and universities. The data thereby obtained was of great value in the work of the organizations which were studying the policies of higher education and the war.

Fully realizing the critical conditions developing in the colleges and universities, the Council of National Defense, through its committee on engineering and education of the advisory commission, called, on May 3, 1917, a meeting of the presidents of the National Association of State Universities, the Association of American Agricultural Colleges and Experiment Stations, the Association of American Universities, the Association of American Colleges, and the Institutional Committee of the Society for the Promotion of Engineering. This committee, under the leadership of Hollis Godfrey, Sc. D., sought to establish a medium of communication between the higher institutions and the departments of the Government which were carrying on the war.

It also proposed to secure the opinion of a conference of college representatives as to the policy presented by the colleges and universities with regard to—

(*a*) Immediate utilization of their resources for the Government service.

(*b*) Possible modification of curricula to fulfill the need for men trained in the technical branches and in military science.

(*c*) Maintaining and improving institutions of higher education for the training of the youth of the Nation to meet the more difficult conditions of living which will follow the war.

The conference was held in Washington, May 5, 1917, and was attended by representatives of 187 institutions.

The first principle stated by the college representatives on May 5 was that men below draft age should continue their college training. The second principle urged the modification of calendars and curricula. The third principle established by the university representatives was that students in applied science should be allowed to finish their college courses before being called to active service. The committee has continually urged this matter upon the War Department. The fourth principle declared the desirability of giving military training in all colleges having sufficient enrollment. Whether influenced or not by the publicity given this matter by the committee, a large percentage of the colleges of the country have adopted military training. The fifth principle related to the medium of publicity through which the Government should reach the colleges and urged that the Bureau of Education, of the Department of the Interior, and the States Relations Service, of the Department of Agriculture, be used for this purpose.

Thus far all the circulars and published letters of the committee have been issued through the Bureau of Education. Finally, the college and university representatives urged the dissemination of information concerning the war and the interpretation of its issues by colleges as one of their major tasks. Reports which have been received indicate that a number of institutions have already been rendering this service effectively.

On July 3 and 4, 1917, the committee on engineering and education held an important conference to which were invited representatives of the leading universities of Canada.

As a result of its study and conference, the committee made the following recommendations, carrying out more specifically the purpose of the resolutions adopted at the conference of May 5, to the end that their students may, before entering active service, reach the point of highest military efficiency and that the supply of trained and educated men may not be cut off more than is necessary either during the war or after its close:

First, that each college endeavor to induce its students to continue their studies at least until the age of conscription and that students

above that age who are not called to special service and who have not completed their education should be urged to do so.

Second, that each college make provision by any available means for military drill for all of its students who are physically fit.

Third, that at a point approximately one year before the military age provision be made wherever possible for a course in military science and tactics, such course to be substituted for one of the regular studies and to be given equivalent credit.

The work of the engineering schools.—A still further development of the work of the Advisory Commission of the Council of National Defense was a study of the relation of engineering schools to the National Government during the war. In accordance with a resolution of the institutional delegates at a meeting of the Society for the promotion of Engineering Education held in Washington, July 7, a committee was appointed for consultation with the heads of the various bureaus, departments, and divisions of the Department of War and the Department of the Navy. It rendered a preliminary report as to the probable need of scientifically technically trained men in connection with the military operations. This committee recommended that an engineer familiar with the equipment and capacity of the higher technical institutions of the country be commissioned in the Army and assigned the task of coordinating the needs of the Army for technically trained men with existing facilities. As a result of this recommendation a general staff officer was appointed to work with the committee. This arrangement finally led to the permanent organization known as the Committee on Education and Special Training of the War Department.

Shortly previous to this time, the Commissioner of Education issued a statement encouraging a full enrollment of the colleges at the opening of the fall term. This statement was followed by a letter of Secretary Lane to President Wilson, who immediately responded. A strong campaign was directed from the Bureau of Education in behalf of a large enrollment in all schools throughout the country.

THE SCHOOL YEAR OF 1917–18.

As this war is primarily one of college-trained men and scientists of experience, it is apparent that the immediate induction into the ranks of young men who show immediate promise of becoming technically qualified is a mistake. The letters and statements of the President, the Secretary of the Interior, the Commissioner of Education, and other officers of importance, have continually urged high-school graduates and undergraduates to continue their education until they were called by the Government. This counsel was seconded by leading British and French military authorities who had found them-

selves seriously handicapped at a critical moment by the loss of qualified college men who, under ordinary circumstances, would have been available in the replacing of officers.

Although the college year of 1917–18 opened with an excellent enrollment all over the country it was not long until the stirring appeals of military and naval service caused a great falling off in attendance, the losses on an average more than 20 per cent in over 300 colleges of the country. While uniform effort was impossible, the colleges vied with each other in genuine patriotic endeavor, and did important service in awakening the country to the real needs of the war. There had also been established, under the provisions of the National Defense act, units of the Reserve Officers Training Corps in the land-grant colleges and in leading State and privately endowed institutions. The Reserve Officers' Training Corps gave opportunity to a considerable number of young men of ability to prepare themselves for commissions in the Army or in the Navy. Notwithstanding the patriotic attitude of the colleges and the many opportunities offered, students became restless, and scholarship deteriorated on account of the uncertainty created by the prospects of the immediate drafting of all men from 18 to 45 years of age. All the colleges have been placed in a trying position through the loss of teachers and pupils. The situation was made still more embarrassing by the lack of financial support caused by the withdrawal of students and by a decrease in many endowments which normally might have been expected. The colleges and universities faced the problem of their existence.

Fortunately, the experience of the Army in training college men warranted a more extended adoption of this method in view of the great demands for officers in manning the new Army of 1918–19. The adaptability and earnestness of college students in gaining proficiency as military and naval officers has been such as to create a deep sense of satisfaction and appreciation.

At this time the committee on education and special training put forward the plan by which all properly equipped colleges of the country could cooperate with the War Department in giving military training to all students of draft age, who are qualified for regular work in college. This plan, if properly carried out, will supply, within a reasonable time, a large percentage of the necessary officer personnel for the rapidly increasing needs of the Army. While this plan is yet in its formative stages, the response of the universities and colleges has been very satisfactory. The Bureau of Education has ascertained by general inquiry that only 10 out of 400 colleges and universities raised the slightest objection to the plan, the objection in these cases being of secondary consideration.

GENERAL CONTRIBUTIONS OF THE COLLEGES TO THE GOVERNMENT.

During the first year of the war nearly 100 colleges and universities offered their plants and equipments to the Government which was beginning a series of extensive and exhaustive experiments in the fields of chemistry, physics, and engineering relating to the war. The results of this offer have been far-reaching. In the first place, the withdrawal of the leading research scholars from the principal universities and colleges in order to carry on the research work of the Government, practically eliminated the usual post-graduate and research work from the regular program.

The universities of Harvard, Columbia, Chicago, and the University of Michigan lost nearly all of their leading professors of physics. The University of Pennsylvania and the University of Cincinnati have also suffered the loss of the greater part of their chemical staffs, the regular work being carried on by the assistants. Likewise, the leading professors of geology and geography have been inducted into the National service. Perhaps no branch of scientific learning has suffered so severely as psychology. It has been estimated by the authorities of the War Department that research work in this subject has been reduced at least 75 per cent.

ORGANIZED EARLY CONTRIBUTIONS OF COLLEGES TO THE GOVERNMENT.

THE INTERCOLLEGIATE INTELLIGENCE BUREAU.

One of the most effective organizations established by the colleges was the Intercollegiate Intelligence Bureau, directed by Dean William McClellan, of the University of Pennsylvania.

By means of its agencies, it was unsually successful in obtaining for the Government the right type of specialists and experts needed by the Government in working out its special war problems. Perhaps no organization has done so much for the advancement of the idea that this war is a war of scientists and specialists whose organized cooperation is indispensable in order to obtain victory.

THE NATIONAL RESEARCH COUNCIL.

The National Research Council which is a creation of the Council for National Defense, is the central agency by which the vast program of scientific research has been so successfully carried on for Government departments of war service. Having availed itself of the best talent of the Nation, the council has assigned to at least 25 leading educational institutions the study of problems related to military optics, ordnance, munitions, topography and food conservation.

Perhaps one of the most important contributions has been that of psychology—the latest of the sciences—to the problems concerned

with the selection of the right men for the different kinds of service required in the Army and Navy. The methods applied by the psychologists have almost completely revolutionized the methods of organizing Army and Navy personnel.

Among the great number of problems now under investigation may be mentioned the following, which concern food conservation, wheat and flour substitutes, gas defense, dyes, devices for the Navy, high explosives, electrical problems connected with wireless, methods of preserving edible fish, powder research, smoke screens, utilization of wood waste to produce acetic acid, a very light military bridge, gas engines, optical problems relating to gun sights, analysis of suspected foods, lignite coal for war purposes, sugar beets, porous basalt for concrete, detection of submarines, making cellulose from pine straw, testing of steel, bronze and wood, testing of automobile parts, testing of paints and varnishes and oils, special research in pathology and military research and special testing in naval tank. Other important technical studies have been carried on successfully.

LATER EFFORTS AT COORDINATION OF THE COLLEGES AND THE GOVERNMENT.

THE EMERGENCY COUNCIL.

Notwithstanding the excellent progress of the work of the organizations designed to bring close cooperation between the colleges and the Government, the need of a more adequate medium of communication between the institutions of higher education and the war service, led to the establishment in January, 1918, of the Emergency Council on Education (now the American Council on Education). The American council is composed of nearly all the leading associations of colleges, universities, and technical schools of the country. The chairman of the council is Donald J. Cowling, president of Carleton College; the secretary-treasurer, P. L. Campbell, president of the University of Oregon; the executive secretary, R. L. Kelly, ex-president of Earlham College. The American council has proved successful in developing closer contacts between the colleges and the Government and is now giving some attention to the promotion of more cordial relations between the universities of the allies and the United States.

THE COMMITTEE ON EDUCATION AND SPECIAL TRAINING OF THE WAR DEPARTMENT.

On February 13, 1918, the War Department appointed a permanent committee to conduct the special program of military education in the colleges of the United States. At present the committee is composed of four members, representing the General Staff, The Adjutant General's Office, the Provost Marshal General's Office, and the War College. With the committee is associated an advisory board of six members representing the educational interests.

THE STUDENTS' ARMY TRAINING CORPS.

In September, 1918, the Committee of Education and Special Training of the War Department carried out the plan of establishing students' army training corps in all colleges and universities which offered a minimum enrollment of 100 students above high-school grade. This task of transforming over 500 institutions of higher learning into institutions of military training was accomplished quickly and with a minimum amount of friction. By a single stroke the colleges of the country were saved from almost virtual extinction, while the Nation was able to provide at a moment's notice the highest type of instruction necessary in training the host of new officers for the Army of 1918–19.

THE AIM AND ORGANIZATION OF THE STUDENTS' ARMY TRAINING CORPS.[1]

Purpose.—The primary purpose of the Students' Army Training Corps is to utilize the executive and teaching personnel and the physical equipment of the educational institutions to assist in the training of our new armies. Its aim is to train officer candidates and technical experts of all kinds to meet the needs of the service. This training is conducted in about 550 colleges, universities, professional, technical, and trade schools of the country.

Vocational and collegiate sections.—The corps is divided into two sections. The collegiate or "A" section and the vocational or "B" section were formerly known as National Army training detachments. They aim to train soldiers for service as trade specialists in the Army. As the program for vocational training is now virtually completed, few, if any, new units of this type will for the present be added.

The "A" or collegiate section, which will be inaugurated October 1, is open to registrants who are members of some authorized college, university, or professional school. Students of authorized institutions may join the Students' Army Training Corps by voluntary induction into the service. They thus become members of the Army on active duty, receiving pay and subsistence, subject to military orders, and living in barracks under military discipline in exactly the same manner as any other soldier.

The housing, subsistence, and instruction of soldiers in both branches of the Students' Army Traning Corps is provided by educational institutions under contract with the Government.

Choice of service.—The members of the Students' Army Training Corps are voluntarily inducted into the service, and are ordinarily allowed to choose the branch of the service for which they wish to be prepared. This freedom of choice, however, is not absolute. It depends upon the individual's qualifications and upon the needs of the service at any particular time.

Opportunities.—The status of a member of the Students' Army Training Corps is that of a private. Members of a collegiate or "A" section who show by

[1] Adapted from War Department General Circular.

their rating in academic and military work that they have unusual ability may be—

(*a*) Transferred to a central officers' training school.

(*b*) Transferred to a noncommissioned officers' school.

(*c*) Assigned to the institution where they are enrolled for further intensive work in a specified line, as, for instance, in engineering, chemistry, or medicine.

Those members of a collegiate section whose record is such as not to justify the Government in continuing their collegiate training may be—

(*a*) Assigned to a vocational training section for technical training of military value.

(*b*) Transferred to a cantonment for duty with troops as a private.

Members of a vocational section who show exceptional fitness or promise may be recommended for officers' schools, or may be continued at institutions for more advanced study.

Relation to draft.—Members of the Students' Army Training Corps, having already been inducted into the service, will not come under the operation of the selective-service law. It is expected that the members of collegiate sections will be transferred from institutions every three months in age groups, the 20-year-old men going first, the 19-year-old men going next, and the 18-year-old men last, roughly corresponding to the period at which men of these ages will be called under the selective-service law. As these groups leave the colleges their places will be taken by new contingents obtained by individual induction, or, if necessary, in depot brigades. Students of such subjects as engineering, chemistry, and medicine may be required to finish their courses where the needs of the service make this desirable.

Members of vocational sections will ordinarily remain at the institution for two months and will then be assigned to various branches of the service in which technicians are needed .

It is impossible to say absolutely how long the training of any particular man will continue, since this will depend upon the capacity of the individual and upon the changing needs of the service.

Curricula.—In addition to 11 hours per week of military training, the course of study of the men in the collegiate section of the Students' Army Training Corps will consist of the ordinary college or technical course, grouped and modified in such ways as are necessary to meet the needs of the War Department. Students in colleges of liberal arts will have as much free election as it is possible to give them. Technical students will have an intensive course mapped out for them by their institution, following directions from the War Department.

Members of vocational sections will pursue such subjects as auto driving, auto repair, bench woodwork, sheet-metal work, and electrical work, etc., in addition to 13½ hours per week of military training.

Members of both sections will attend courses on the issues of the war.

The following paragraphs, taken from the descriptive circular issued by the War Department, explain clearly the purpose of the new corps, besides giving other information of value.

CHANGES IN COLLEGE CURRICULUM.[1]

Under the war program all curricula are based on quarterly courses with terms of 12 weeks each, including examination periods. It is planned that each term be a unit in itself, so that students of approximate age may be withdrawn at the end of any term. The new program will be adjusted to

[1] Adapted from General Circular of War Department.

meet the needs of the different age groups. Students who have reached the age of 20 (on September 12, 1918), whether previously in college or not, may have but a single term of 12 weeks in college, and are expected to devote practically their whole time to the special programs. There are five programs which are especially adapted to the needs of the different types of service, namely: I. Infantry and Artillery; II. Air Service; III. Ordnance Corps and Quartermaster Corps; IV. Engineer Corps, Signal Corps, Chemical Warfare Service; V. Motor Transport and Truck Service.

Students who have reached the age of 19 (on September 12, 1918), whether previously in college or not, may have but two terms in college, and should therefore complete the essential subjects in two terms.

For all other students, whether previously in college or not, curricula will be prepared so that the essential subjects may be distributed over three terms.

The remaining time will be available for such additions from the list of allied subjects as may be selected by their respective educational institutions.

The essential subjects required of every member of the Students' Army Training Corps who is preparing to become an infantry or artillery officer, and who has not had equivalent training, are war issues, military law and practice, hygiene and sanitation, surveying and map making.

The allied subjects which may be elected by members of the Students' Army Training Corps are as follows: English, French, German, Italian, mathematics, physics, chemistry, biology, psychology, geology, geography, topography and map making, meteorology, astronomy, hygiene, sanitation, descriptive geometry, mechanical and freehand drawing, surveying, economics, accounting, history, international law, military law, and government.

Permission may be granted for the recognition, as an allied subject, of not more than one subject outside the above list, provided that it occupies not more than three hours per week in lectures and recitations with corresponding time for study.

CHANGES IN METHODS.

It is evident from a study of the new curricula that new and intensive methods of study and recitation will be adopted, the results of which may be of far-reaching significance in college education. The abolition of the secondary activities in colleges and universities, such as athletics, fraternity life, and student activities, will give opportunity under the inspiring stimulus of war aims to gain a spirit of concentration and scholarship seldom if ever equaled.

On the other hand, there will be little if any chance for genuine reflective or productive thinking with the sole exception of the technical students who may be allowed to continue and complete their specialized studies.

It is also evident that nonmilitary subjects will have relatively little chance during the war, especially in those groups which are only in school for one or two terms. The classics will be left to the few who are not members of the Students' Army Training Corps.

Whatever the influence on the future program and methods the present plan may have, it is clear that higher education has given itself soul and body to the national service. It has devoted voluntarily its splendid organization to the winning of the greatest war

in the history of the world, and has for that reason adapted its program to meet the emergency.

INTERNATIONAL RELATIONS IN HIGHER EDUCATION.

One of the happy results of the war has been the closer entente between the allied nations. In order to further closer relationship and mutual understanding, a mission of leading university officers of Great Britain was invited to visit this country in the early fall. The response on the part of the British authorities was favorable, resulting in the sending of the following group of educators:

Dr. Arthur Everett Shipley, vice chancellor of the University of Cambridge.
Sir Henry Miers, vice chancellor of University of Manchester.
Rev. Edward Newburn Walker, fellow, senior tutor and librarian, member of the Hebdomadal Council, Queens College, Oxford University.
Sir Henry Jones, professor of moral philosophy, University of Glasgow.
Dr. John Joly, professor of geology and mineralogy, Trinity College, Dublin.
Miss Caroline Spurgeon, professor of English literature, University of London.
Miss Rose Sidgwick, professor of ancient history, University of Birmingham.

This distinguished educational mission will be the guests of the principal officers of the Government, the presidents of many of the leading universities and colleges, as well as a group of influential citizens of the country. Without doubt the interchange of ideas and the deeper acquaintances gained through the visit of the mission will be of lasting benefit to the allied nations.

THE FEDERAL BOARD FOR VOCATIONAL EDUCATION.

Under the Smith-Hughes Act Federal appropriations ultimately aggregating over $7,000,000 per annum have been made available for cooperation with the States in the promotion of vocational education in agriculture, in trades and industries, and home economics, including the preparation of teachers. The principle of Federal aid through the States to education in institutions of subcollegiate grade has been established.

Its early enactment was strongly urged by President Wilson in addressing Congress in December, 1916, as—

> of vital importance to the whole country because it concerns a matter too long neglected, upon which the thorough industrial preparation of the country for the critical years of economic development immediately ahead of us in very large measure depends. * * * It contains plans which affect all interests and all parts of the country, and I am sure that there is no legislation now pending before the Congress whose passage the country awaits with more thoughtful approval or greater impatience to see a great and admirable thing set in the way of being done.

As an expression of educational policy, the new act embodies some important departures from previous legislation. It makes provision

for the training within the schools of a large group of our population unreached directly by the Federal Government. On the other hand, by offering instruction along vocational lines and of subcollegiate grade, it supplements the Morrill Act, the expressed purpose of which is to maintain colleges "to teach such branches of learning as are related to agriculture and the mechanic arts * * * in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." On the other hand, since it contemplates a system of training in the schools, it also supplements the Agricultural Extension act of 1914, in which the service provided is "the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or resident in State colleges in the several communities." Since it imposes definite requirements as to the training of teachers, it also represents a material extension of authority over the purely permissive provisions of the Nelson amendment of 1907.

The Smith-Hughes Act creates a Federal Board for Vocational Education. This board consists of seven members, including the Secretaries of Agriculture, Commerce, and Labor, and the United States Commissioner of Education, ex officio, with three members appointed by the President and confirmed by the Senate, ultimately for a term of three years each. One of the appointed members is a representative of the manufacturing and commercial interests, one of the agricultural interests, and the third of those of labor. The board selects its own chairman each year.

The Federal board is charged with the administration of the act, the details as to the care of funds, the certifying of the States, etc., in general plan resembling the legislation for the agricultural colleges and experiment stations. In addition it is empowered to make, or have made, investigations and reports to aid the States in the establishment of vocational schools and classes and in giving instruction in agriculture, and the trades and industries, commerce and commercial pursuits, and home economics. These studies include agriculture and agricultural processes and the requirements upon agricultural workers, similar studies as regards the trades, industries, and commerce, home management, domestic science, and the study of related foods, and the principles and problems of administration of vocation schools and of courses of study and instruction in vocational subjects. In the discretion of the board, the studies concerning agriculture may be made in cooperation with or through the Department of Agriculture. Similar cooperative arrangements may be made with the Departments of Labor and Commerce for industrial subjects, while the studies of the administration of vocational schools, curricula, and methods of instruction in vocational subjects may be taken up in cooperation with or through the Bureau of Education.

An appropriation of $200,000 per annum, available from the date of passage of the act, is made to the board for its expenses.

To cooperate with the Federal board in carrying out the act, each State when accepting its provisions is to designate a State board of at least three members. The State board of education or some board having charge of the administration of public education or of any kind of vocational education may be designated as the State board, or an entirely new board may be created.

The State board is to prepare plans for the approval of the Federal board, showing the details of the work for which it is expected to use the appropriations. These plans it is specified must show the kinds of vocational education contemplated, the kinds of schools and equipment, courses of study, methods of instruction, and the qualifications and the plans for the training of the teachers and agricultural supervisors. In all cases the work must be conducted under public supervision and control.

The plans of expenditures for salaries in agricultural and industrial subjects must show that the controlling purpose of the education is to fit for useful employment, that the training is of less than college grade, and that it is designed to meet the needs of persons over 14 years of age who have entered upon or who are preparing to enter upon agricultural or industrial work.

The Federal appropriations to the States are divided into three distinct groups, providing respectively for the payment of salaries of teachers, supervisors, or directors of agricultural subjects; for the payment of salaries of teachers of trade, home economics, and industrial subjects; for the preparing of teachers, supervisors, or directors of agricultural subjects, and of teachers of trade and industrial and home economics subjects.

The main initial appropriations for salaries in agricultural subjects is $500,000. This is increased by $250,000 per annum during the next six years and then by $500,000 per annum during the next two years, making an appropriation of $3,000,000 for the fiscal year 1926 and annually thereafter. Like appropriations are made for salaries in industrial subjects.

The main appropriation for preparing teachers and supervisors is likewise $500,000 for the first year, but increases to $700,000 and $900,000 respectively for the next two years and then becomes $1,000,000 per annum thereafter. The Federal appropriations for teacher training must be divided among agricultural, trade and industrial, and home economics subjects, no one of these subjects being granted more than 60 nor less than 20 per cent of the State's allotment for that year.

The training of the teachers provided for will throw a very heavy burden of responsibility on our higher technical institutions and par-

ticularly the land-grant colleges. These institutions have been very successful in training technical experts who have contributed in large measure to the success of our industries. They have not as yet paid any large attention to the training of teachers for secondary schools of the strictly vocational type. The pedagogy of this class of education is yet in its preliminary stages. It evidently will not do simply to copy what has been worked out abroad. There is therefore great incentive for men of original thought and inventive skill to enter this comparatively new field of teacher training.

Up to January 1, 1918, 48 States accepted the Smith-Hughes Act either by specific provisions of the legislatures or by acts of the governors and up to January 1, 1918, the plans of the 48 States had been examined by the Federal Board for Vocational Education, approved, and the board had certified to the Secretary of the Treasury that these States were entitled to receive the allotments for the year 1917–18, apportioned by the terms of the act.

Federally aided vocational courses have been set up in agriculture in 41 States, in trade and industrial subjects in 32 States, and in home economics in 29 States; 22 States have organized courses in each of these three fields; in 46 States teacher-training courses have been organized.

The record of the States in this work is impressive, especially when it is borne in mind that the record covers an initial period of only 10 months. In Massachusetts, for example, vocational agriculture is taught in 19 secondary schools with Federal aid; trade and industrial subjects, in 36 schools; and home economics, in 29 schools. In New York the number of Federal-aided secondary schools is 4, of agriculture 60, and for trades and industries, 40; in Pennsylvania, for agriculture, 38, for trades and industries, 131, and for home economics, 69; in California, for agriculture 12, for trades and industries 14, and for home economics 14; in Indiana, for agriculture 37, and for trades and industries 21; in Mississippi, for agriculture 34, for trades and industries 1, and for home economics 3. Those States are illustrations of the widespread development of secondary vocational education. The record for other States is equally impressive.

The chief handicap in the promotion or introduction of vocational instruction was the lack of qualified teachers. This was due largely to the present war emergency, many of the teachers being drafted or volunteering for service in the Army.

Under supervision of the Federal board, war emergency training classes for conscripted men have been organized in the public schools throughout the country. A series of war emergency training courses for Army occupations has been prepared, and those courses have been adopted extensively not only for classes organized under direct

supervision of the board, but as well for classes organized by the War Department among men enlisted in the Army, and for classes conducted on a commercial basis under private civilian control.

The preparation of these courses and the organization of training classes have been undertaken at the request of and in cooperation with the Signal Corps and the Quartermaster in the War Department, and the United States Shipping Board.

An arrangement was perfected late in October, 1917, with the approval of the Secretary of War, for the utilization of the educational facilities of the United States by the Federal board in cooperation with the War Department for the purpose of training drafted men in various occupations prior to their reporting at the cantonments.

This work has continued and the war training division of the Federal board reports that on June 13, 1918, 12,000 men had been trained through the Federal board and State authorities for vocational education, and turned over to services—6,000 in mechanical lines, 5,000 in radio work, for the Army, Navy, and mercantile marine, and 1,000 in clerical occupations for Quartermaster Corps work. It estimates that an additional 3,000 men have been trained by private agencies through the impetus given to the work by the Federal board, using Federal board courses of instructions.

The War Department committee on education and special training had in its classes 7,086 in April, 10,685 in May, and 26,666 in June. Contracts in force provided for the training of 100,000 men during the current year. This training is under military control, and it was found necessary to provide for the needs of the Army, in addition to the training in voluntary classes under the Federal board.

Classes in shipbuilding occupations have been established in cooperation with the Federal board in the following States:

North Carolina—Wilmington, evening.
Pennsylvania—Chester, Girard College students.
Ohio—Cleveland, evening classes; Lorain, evening classes.
New York—Port Richmond, Staten Island, evening; Newburgh, evening; Buffalo, evening.
Minnesota—Duluth, evening; part time.
Delaware—Wilmington, evening.
Connecticut—Bridgeport, evening, part time, all day; Housatonic, evening, and part time.
California—San Diego, evening; Long Beach, evening; San Pedro, evening; Oakland, evening; San Francisco, evening; Alameda, evening.
Maine—Bath, evening.
Oregon—Portland, evening, not confirmed; Astoria, evening, not confirmed.
Washington—Seattle, evening.

The following States have appointed agents who will work whole or part time on these classes: Ohio, New Jersey, Texas, Connecticut, Alabama, New York, and California.

THE SMITH-SEARS ACT.

In June, 1918, Congress passed the Smith-Sears Act, providing for the vocational rehabilitation and return to civil life of disabled persons discharged from the military or naval forces of the United States. The act delegates to the Federal Board for Vocational Education the responsibility of reeducating the disabled men in some useful employment, after their discharge from the Army or Navy, and provides for a plan of cooperation between the board and the Surgeon General's Office, covering the work done in hospitals, in order that the men may have the advantage of a continuous and coordinated plan.

It is provided that there shall be full and complete cooperation of the several Government offices concerned with the future welfare of men discharged from the Army and Navy, including the medical and surgical services of the War Department and the Navy Department, the Bureau of War Risk Insurance in the Treasury, and the labor exchanges in the Department of Labor, and the Federal board. Each will render service in retraining and returning to civil employment men disabled in the war.

The Federal board will act in an advisory capacity in providing vocational training for men during their convalescence in the military hospitals, before their discharge from the Army or Navy, and will continue such training to finality after discharge, as the civilian agency or rehabilitation and placement in industry.

VOCATIONAL TRAINING IN ARMY HOSPITALS.

The subdivision of education in the division of physical reconstruction under the Surgeon General, United States Army, was begun in October, 1917, for the purpose of devising plans for providing educational facilities for disabled soldiers and sailors during the period of hospital treatment and convalescence. On May 20, 1918, Dr. James E. Russell, dean of Teachers' College, Columbia University, New York City, was appointed chief of the subdivision.

The work undertaken has been practical, so far as possible, and has included work needed for the hospitals. Activities include, besides repair work of various kinds, basketry, typewriting, telegraphy, academic studies, agriculture and gardening, bookkeeping, freehand and mechanical drawing, auto repair, carpentry, cobbling, and other handicrafts. In all, more than 100 different activities have been introduced into the hospitals. Sixteen general convalescent and reconstruction hospitals have been provided for, or one in each of the 16 military districts.

The records of 516 cases which have been treated in four hospitals show 134 men able to return to full military duty, 210 fit for return to limited service, and 172 who are eligible for discharge.

In the last group, 12 are classed as helpless or institutional cases; 121 are able to return to their former occupations; and 39 will need further training to fit them for earning a livelihood.

These figures show the division of responsibility in the work of reconstruction. The task of fitting men for further military service is at present the most urgent need, because wherever an able-bodied man behind the lines can be replaced by one less fit physically but vocationally capable, a soldier is gained for active duty.

THE STUDENTS' ARMY TRAINING CORPS.

The Students' Army Training Corps represents a unique educational undertaking on the part of the Government. The work is under the direction of the Committee on Education and Special Training of the War Department.

The primary purpose of the Students' Army Training Corps is to utilize the executive and teaching personnel and the physical equipment of the educational institutions to assist in the training of our new armies. Its aim is to train officer-candidates and technical experts of all kinds to meet the needs of the service. This training is conducted in about 550 colleges, universities, professional, technical, and trade schools of the country.

The corps is divided into two sections—the collegiate or "A" section and the vocational or "B" section. Of these the former is discussed elsewhere under higher education.

Concerning the latter, it is to be noted that the experience of three years of war in Europe demonstrated the need of large numbers of skilled mechanics and technicians of many kinds. When the United States entered the war, therefore, and undertook the organization of an army, it soon became apparent that a plan must be devised to train mechanics quickly and in large numbers. To accomplish this result the War Department did not depend on the establishment of new schools, but utilized existing institutions which had the necessary facilities. The men, in uniform, are assigned to institutions in units of 200 to 2,000, where they are housed and fed under military discipline for periods of two months each. Military drill and industrial instruction, including shop practice, are provided in an intensive form as the regular daily routine. The initial assignments of men began work on April 1, 1918. Some idea of the magnitude of the undertaking is conveyed by the announcement that on August 1 there were 52,025 soldiers under instruction, in 35 different trades or occupations, in 144 institutions, located in 46 States and the District of Columbia. It is estimated that by the close of the fiscal year, June 30, 1919, more than 300,000 men will have received instruction in these courses, which will be sufficient to make them definitely serviceable in some mechanical or technical duty in addition to their training as soldiers.

MEDICAL EDUCATION AND THE WAR.[1]

Sweeping reforms in American medical education have been in progress for 15 years, and were largely completed before this country was drawn into the world war. For the past six or seven years the majority of medical schools have not only been enforcing high entrance standards, but also have been operating under greatly improved conditions in other respects. The majority of students graduating in the past several years, therefore, have received a medical training equal to that obtainable anywhere. Furthermore, it is these recent graduates who, in larger proportions, have entered the Government medical services and who will be largely responsible for the medical care of our American soldiers and sailors. It is evident, therefore, that those fighting for the preservation of America and American ideals now have as skilled medical care as is obtainable anywhere. That this can be said is due to the energetic campaign to improve medical education that has been carried on since 1904.

MEDICAL EDUCATION AND THE SELECTIVE SERVICE.

When the selective-service law was passed in May, 1917, it made no provision for the exemption of medical students. A study of the effect the draft would have on the enrollments of medical schools showed that from 50 to 65 per cent of the students would be taken in the first three calls, which would force the majority of medical schools to suspend. If the war lasted any considerable time, the result would be seriously to diminish or cut off the annual supply of medical graduates; hospitals would be without internes, and there would soon develop a serious shortage of physicians for both military and civilian needs.

The solution of the problem was found in the National Defense act of 1915, which provided for the Medical Reserve Corps of the Army. Under the provisions of this law medical students were permitted to enroll in the Medical Enlisted Reserve Corps. This made them subject to call at any time, should extreme emergency require it.

It was the stated policy of the Government, however, to leave these students on an inactive status until they should complete their medical course and secure their hospital training. It is believed that they could render the country a better service by finishing their training and becoming efficient medical officers, than by entering at once on active service without that training. The provision for the Medical Enlisted Reserve Corps relieved the uncertainty in regard to the enrollment of medical students, so that medical classes have been re-

[1] This section consists of extracts from a paper prepared by Dr. N. P. Calwell, Secretary of the Council on Education of the American Medical Association for the forthcoming Biennial Survey of Education in the United States.

tained at a normal status, the only loss being of those students who voluntarily enlisted for military service.

Provision was still necessary, however, for the students in the premedical classes who would arrive at draft age before becoming bona fide medical students. The calling into service of such students would prevent the medical schools from obtaining medical students and would eventually be as serious as if the medical students themselves were called to service. There also arose a serious problem as to medical teachers. Those in the draft age were being called into active service and others were volunteering, even though strong efforts were made to induce them to remain at their teaching duties. It appeared that many of the colleges would have to suspend because of the depletion of the ranks of their teachers.

In an effort to solve these problems, at the call of the Surgeon General a conference of representatives of medical schools was held in Chicago, June 11, 1918. At this conference an advisory committee on medical schools, made up of representatives of medical colleges and licensing boards, was chosen to cooperate with the standing committee on medical education of the Medical Department of the Army, for the prompt solution of such problems as might arise in connection with medical education. At a meeting of the two committees on the day following the Chicago conference, attention was called to the provision made for the Students' Army Training Corps, which suggested a solution for the exemption of premedical students. It was also urged that premedical and medical students as well as medical teachers be given Government recognition by being placed in uniform and that the teachers be granted suitable rank.

Another conference of the two committees was held in Washington July 21, 1918. The arrangements for the Students' Army Training Corps has made progress under the committee on education and special training of the War Department. Through the Students' Army Training Corps it was planned that all students enlisting be retained in the colleges until their special training be completed. On arriving at draft age the students would be required to register under the selective service law. When called by his local board, each student's record would be examined and it would be determined whether he would be called in active service. The stated policy of the Government, however, was that students who were making satisfactory headway in their studies would be retained in college until their training had been completed.[1] The Students' Army Training Corps clearly

[1] Since this article was written, changes in the plans outlined have been made necessary under the extension of the draft regulations to include all men from the age of 18 to 45, inclusive. These changes are too extensive as well as incomplete to be dealt with at this time.

provided for the training of medical officers as well as of engineers, and for officers in other special lines. As to the threatened dearth of medical teachers due to losses by enlistment, a solution of the problem was found in the rule providing for the exemption of those engaged in "essential industries." Each college was requested by the Surgeon General to furnish a list of its essential teachers who, it was planned, would not be called to active duty, even though they should enlist, but should be left at their teaching duties on the ground that they were engaged in an "essential industry."

Through the Medical Enlisted Reserve Corps a large majority of the medical student enrollment throughout the United States came under the control of the Surgeon General of the United States Army. This control of the student body, coupled with the measure made necessary to retain in each college an adequate corps of medical teachers, brought the medical schools also to a large extent under the same national control. It became necessary, therefore, soon after a state of war was recognized, for the Surgeon General to designate what medical schools were worthy of recognition and to establish rules for the satisfactory conduct of such colleges. Since previously the legal control of medical education had rested solely with State medical licensing boards, it was determined to consider as "well recognized medical schools" those which were recognized by the majority of State licensing boards. Of the 90 medical colleges now existing, 81 are "well recognized."

The usual demand for physicians as medical officers for the tremendous armies being organized made it necessary carefully to ascertain the present supply of physicians, the future annual output which should be maintained from the medical schools, and the educational standards and other measures which should be enforced, and at the same time guarantee an adequate supply of physicians for civil and military needs. One of the earliest decisions rendered, which has since been adhered to, was that the present reasonable standards of preliminary education, namely, two years of work in an approved college of arts and sciences or its actual equivalent, should be maintained. In fact this standard of premedical qualifications was considered so important that all "well-recognized" medical schools were instructed to enforce that requirement on all students admitted on and after October 15, 1918.

Careful consideration has also been given to the question of requiring continuous sessions in medical schools so that they might promptly and intelligently be put into effect should the emergency demand it. Looking toward this possibility a few of the medical schools which were properly equipped to do so have already put that measure into effect.

PRACTICAL AND CLINICAL EXAMINATIONS.

There has been much improvement in the character of the licensing examination in some States. A larger number of States have established an efficient examination, including practical laboratory and clinical tests, of those who are to practice the healing art, and in this way they are better protecting the public from ignorance and incompetence. Educational and technical efficiency can not be accurately measured by a written examination alone. A student's fitness intelligently to diagnose and treat human disorders can be brought out only by testing his ability to differentiate between normal and abnormal conditions, in the laboratory as well as at the bedside.

An agency has recently been established, the National Board of Medical Examiners, which has been demonstrating how these practical and clinical examinations can be made at frequent intervals in prominent hospitals in various large cities throughout the country; and members of State boards have been invited to attend them. The spirit and purpose of the examinations, as well as the ease and facility with which they are conducted, are so evident that State board members will doubtless be encouraged to adopt them in the regular examination for licensing physicians.

NATIONAL BOARD OF MEDICAL EXAMINERS.

The National Board of Medical Examiners, just mentioned, was organized in 1915. It consists of 15 members, including the Surgeon Generals of the Army, Navy, and Public Health Services and one other representative of each of those services; 3 representatives of State medical licensing boards; and 6 members appointed at large. Its establishment on a high plane was made possible by the Carnegie Foundation for the Advancement of Teaching, which made an appropriation of $15,000 per year to cover the expenses of the board until such time as it might be placed on a self-supporting basis.

Six examinations have been held by the board; the first and second at Washington, respectively in October, 1916, and in June, 1917; the third at Chicago in October, 1917; the fourth at New York City in January, 1918; and the fifth at Fort Oglethorpe, Ga., and Fort Riley, Kans., in April, 1918. At these examinations altogether 93 applicants were examined, of whom 72 passed and 21 failed, the percentage of failure being 22.6 per cent.

This board is a voluntary organization, its object being to conduct examinations of physicians so thoroughly as to prove without a doubt their qualifications for the practice of medicine. The value of its certificate, aside from being a qualification of merit, depends on the recognition given to it by State medical licensing boards.

Such recognition has already been given or assured by the licensing boards of the following 12 States:

Colorado.	Kentucky.	North Dakota.
Delaware.	Maryland.	Pennsylvania.
Florida.	New Hampshire.	Rhode Island.
Idaho.	North Carolina.	Vermont.

When the permanency of the national board is established and the high character of its examinations is more generally recognized, its certificate will doubtless be recognized by the licensing boards of a large numbers if not all of the States. It will also furnish a credential by which reciprocity in medical licensure with other countries may be established. A successful applicant may enter the regular Medical Corps of either the Army or Navy without further professional examinations, if his papers are passed and are satisfactory to a board of examiners of those services.

PREMEDICAL COLLEGE WORK.

Since, in 1916, two years of work in an "approved" college had been so generally adopted as a minimum educational requirement for admission to medical schools in the United States, it became important to prepare a schedule of the subjects taught in the first two years of recognized colleges which would best prepare the student for his subsequent medical work. A circular letter was sent out by the Council on Medical Education to presidents of 100 or more of the leading universities, as well as to registrars and university examiners who were skilled in the evaluation of credentials of work done in various educational institutions. In this way an abundance of data was collected. A special committee was appointed to study the problem and to develop a schedule of required and elective subjects which would make up the 60 semester hours required, and to have this schedule conform as nearly as possible with the regular curricula of colleges of arts and sciences.

A preliminary report of this committee was prepared and published in August, 1917. It was presented for discussion at the annual congress on medical education and licensure which was held in Chicago in February, 1918, following which the committee completed a report which was finally adopted. This report included a schedule of the subjects usually included in the first two years of the college course. Of the 60 semester hours of premedical college work which were required for admission to medical schools, 12 were to be taken in chemistry, 8 in physics, 8 in biology, and 6 in English, leaving 26 semester hours of elective subjects. It was specified that, of the electives, 12 semester hours should be taken in nonscience subjects. The outline suggested has received the indorsement of the American

Medical Association and the Association of American Medical Colleges, as well as of a considerable number of college presidents.

SCHOOL HYGIENE AND PHYSICAL EDUCATION.

STATE LEGISLATION FOR PHYSICAL EDUCATION.

Within the past 3 years, 8 States have enacted laws providing for State-wide physical education, namely, Illinois in 1915; New York in 1916; New Jersey, Nevada, Rhode Island, and California in 1917; Delaware and Maryland in 1918. In 6 other States, Massachusetts, Connecticut, Pennsylvania, Nebraska, Ohio, and Colorado, legislative attention has been given to this matter, but no legislation has yet been enacted. In New Jersey and Massachusetts special commissions made exhaustive investigations and reports as the basis for legislative action. Though this legislation in all but 2 States was enacted prior to the current year, it did not become effective until this year, except in New York and Illinois. In New York, however, the law was amended in 1918 so that the law in final form will not be in full effect until 1918–19.

The most significant feature of this legislation is the broad and comprehensive interpretation of physical education given either in the statutes themselves or in the administrative programs adapted by the State departments of education. In the New York program physical education is interpreted as covering: "(1) Individual health examination and personal health instruction (medical inspection); (2) instruction concerning the care of the body and concerning the important facts of hygiene (recitations in hygiene); and (3) physical exercise as a health habit, including gymnastics, elementary marching, organized supervised play, recreation and athletics." In the California statute the aims and purposes of the physical education are specified: "(1) To develop organic vigor, provide neuromuscular training, promote bodily and mental poise, correct postural defects, secure the more advanced forms of coordination, strength, and endurance, and to promote such desirable moral and social qualities, as appreciation of the value of cooperation, self-subordination, and obedience to authority, and higher ideals, courage, and wholesome interest in truly recreational activities; (2) to promote a hygienic school and home life, secure scientific sanitation of school buildings, playgrounds, and athletic fields, and the equipment thereof."

The Rhode Island syllabus states that "Physical education may be defined as including healthful, sanitary environment; medical inspection; instruction in physiology and hygiene; and exercise in the form of such motor activities as marching, gymnastics, dancing, supervised play and athletics."

With the exception of the Nevada law, all of these State laws provide for compulsory physical education in all their public schools. The most notable weakness is the failure to provide adequate financial support for administration and supervision, and the failure to provide administrative means for making the laws locally effective.

The results of the first year under the new law in New Jersey are summarized by the State commissioner as follows:

> Physical training, systematically taught this year for the first time in many schools, will be more effective next year. It has already enlivened the schools, created new enthusiasms and contributed to the welfare of children and teachers. * * * The public needs to realize that money expended for health education, both rural and urban, is money better spent than for almost anything else. * * * We need not only better medical inspection, but also more school nurses, in country as well as in city. It can not be said with emphasis too great that physical training is preparedness. Its purpose is no other than to increase our man and woman power.

THE NATION'S NEED OF PHYSICAL EDUCATION.

The war has suddenly revealed to us and to all other nations the basic value of human life. It is no longer merely the voice of the philanthropist crying in the wilderness the doctrine of the individual's right to abundance of life; it is the Nation in its hour of crisis demanding the fullest physical capacity of all its men, women, and children. "The truth is pounded home with every succeeding engagement on land and sea that the conservation of human life is now a part of practical affairs, something to receive its place in the everyday consideration of those responsible for national progress." In war's terrible markets human life is the basic legal tender. Money, munitions, ships, and all the other essentials for the prosecution of war are but promissory notes.

This is recognized in the English education bill which at this date (June 30) is in the final stages of passage. It includes provisions for a comprehensive and thorough program of health conservation and physical education. This program covers adequate medical supervision both of children in school and children in industry and physical education in all elementary, secondary, and continuation schools and the provision of proper equipment for the same, and provision for physically and mentally defective children.

In France, a strong committe has been formed, of which several members of the Chamber of Deputies are members, for the study and promotion of physical education, social hygiene and race conservation. The committee proposes to cooperate closely with the public authorities, the universities, the faculties, the commercial centers, the industrial centers, the financial powers, and the press.

Its program includes a general method of rational physical instruction; a system of schools of physical education for instructors of the Army and of both sexes; simplification of school programs and introduction of a physical test in all examinations; emphasis upon outdoor exercises; outdoor schools and open-air colonies for physically abnormal children; complete reorganization of school medical inspection; the employment of trained teachers of gymnastics; legislation restricting juvenile labor; and a larger place in the training for military service to physical education and athletics.

In this country, likewise, we are recognizing that physical efficiency of the citizens is not only a matter of individual or local or State concern, but also a matter of supreme national concern. The fact that the first draft figures show a wide variation in the percentage of physical effectives that the States can contribute to the national defense—an extreme variation of 33 per cent—lifts the question at once into the field of national statesmanship. The experience of the training camps is a conclusive demonstration of the need of a national program that shall produce not only physically sound but also physically educated citizens.

President Emeritus Eliot of Harvard in a weighty address on "Certain Defects in American Education" (Teachers' Leaflet No. 5, Bureau of Education, June, 1918) states the case clearly and forcefully:

> To secure for every child in the country a complete course of physical training is a great national object in war times and peace times alike, and part of the expense of the course should be borne by the National Government. The Swiss Federal Council prescribes the program of physical training for every school in Switzerland, and appoints and pays the national inspectors who see that this program is carried out. The federation also makes a small contribution to the cost of this training throughout the Republic. The war with Germany has already taught us that the United States should henceforth and at once do the same thing in aid of the much larger expenditures of the States and the municipalities on the same all-important subject. and should make sure that the training is actually given. When a proper course of physical training has been in operation in the United States for 12 to 15 years, the productiveness of the national industries will show a great increase, and the young men who are to fill the permanent Army and Navy of the United States will come to the annual mobilization with bodies already fit for the work of a soldier or sailor.

The commission in the national emergency in education of the National Education Association emphasizes strongly the importance of physical education and health conservation in its program for Federal legislation. The American Federation of Labor in its educational program includes the following planks:

> The provision of ample playground facilities as a part of the public-school system.
>
> Continuous medical and dental inspection throughout the schools.

The organization and equipment of special classes for children who are subnormal, either mentally or physically, and also special classes for children who are found capable of making more rapid progress than is possible in a standard school.

The establishment of complete systems of modern physical education.

Numerous patriotic, civic, health, and philanthropic organizations have taken a similar position. A national committee on physical education has been formed with purposes similar to those of the French "committee" already named. More specifically it is devoted to the promotion of State and Federal legislation for physical education. The committee, in its proposed program for Federal legislation, adopts the interpretation of physical education as illustrated in the best recent State laws. "It assumes physical activity as the basic thing, but conditioned upon, and integrally related with, wholesome physical environment, individual physical examination and record, medical supervision of schools and school children, development of health habits and instruction in health knowledge, hygienic school management and procedure, and cooperation with all agencies that make for physical upbuilding and the moral growth inevitably incident to sane, wholesome, active physical life."

It asks that physical education be for boys and girls alike; for all children between 6 and 18 years, inclusive, in all schools and in industry; for provision for investigation and demonstrations in the interest of progressively scientific standards; for Federal aid to the States and Federal cooperation in the administration of all State systems, but with guarantees of State autonomy and initiative.

PHYSICAL EDUCATION AND MILITARY TRAINING.

Physical education as interpreted by the individuals and organization cited above is not a substitution for military training. With respect to boys, it is premilitary training. It is a program for producing physically fit men and women by physically educating boys and girls during the period of immaturity. The program stops at 18 years of age. Efficient military training can not begin earlier than 18 years. If universal military training should be adopted, this program would insure maximum preparation of a maximum number of young men for military training. It is preparatory to military training in the following ways: By the selection of boys fit for military training through recurrent physical examination during the growth period and the early detection and correction of remediable defects; by systematic training through graded systems of exercises adapted to children of different ages, through corrective exercises for postural and muscular defects and through intensive physical training and athletics for the older boys; by systematic training into health habits and instruction in health knowledge; and

by increasing the physical efficiency of those whose defects would confine them to limited service, through early detection of defects, through specialized training of such individuals, and through keeping them out of occupations for which they are unfit.

VOLUNTARY ORGANIZATIONS.

The war has given stimulus to many voluntary organizations seeking to improve the health of school children. It may not be invidious to mention especially the Child Health Organization. This is an outgrowth of a committee of the New York Academy of Medicine on "War-time problems of childhood," formed primarily to study the problem of malnutrition among school children. "The revelation of the extent to which malnutrition had been shown to exist among school children of New York and its steady increase, due to ignorance of food values and the rising cost of food, was brought to the attention of Secretary Lane, of the Department of the Interior, who urged the formation of a national committee composed of lay and medical members to study the problems and advise means for its solution. In order to avoid the creation of an entirely new association, an organization to promote the health of school children was perfected as one of the branches of the National Child Labor Committee, which has always been interested in health education."

The following is a program that the Child Health Organization has set itself: To teach health habits to children and to secure adequate health examinations for all children in the public schools of the country; to consider the urgent problem of malnutrition among school children; to safeguard the health of children in industry; propaganda to awaken the public to the necessity of conserving the health of the school child as a basis of national security and stability; to promote or cooperate with other bodies in securing legislation for the attainment of these objects.

Active cooperation with the Bureau of Education is assured.

SEX EDUCATION.

The war has lifted the veil of false modesty from the question of social hygiene and sex education. Effective methods of instruction in the cantonments have been developed. The Commission on Training Camp Activities through its camp community service has done much to educate the public. The State health departments and the United States Public Health Service have carried on effective educational propaganda. Religious and educational societies as well as medical societies are seriously grappling with the great problems of sex education. The bureau in cooperation with the medical section of the Council of National Defense, as noted above (p. —), has issued

a pamphlet "Keeping Fit" for high-school boys, giving simply and briefly the main factors in physical fitness, including sex. The appreciation of this pamphlet has been instantaneous and sincere. Requests have come for large numbers of copies, not only from high schools, but also from the Young Men's Christian Association, Boy Scouts, industrial firms, and many other sources. Several hundred thousand copies will be needed to meet the demand in the coming year.

MEDICAL INSPECTION.

In all foreign countries the medical supervision of schools has suffered during the war. School medical officers, like all other members of the medical profession, have been called to military service. In our own country the same condition prevails though to a less degree. In few States or communities, however, has there been any improvement in the work of school medical supervision. North Carolina appears to be one exception. The revised law which went into effect at the beginning of the present school year requires that teachers shall make a preliminary examination of all pupils, and provides for detailed examination of all suspected children by the county medical officer or by a physician designated by the State health department. The report of the first year's work under the new law shows that "more than 3,000 teachers properly filled out the cards after careful preliminary examination of more than 150,000 children": and that of this "number of children, 34,387, or nearly one-fourth, have been carefully examined by the school physician or a specially trained school nurse." The report further shows much successful follow-up work and the establishment of dental clinics. "The most gratifying feature of the year's work has been the uniformly satisfactory work of the teachers in completing the preliminary examination of the children."

THE PUBLIC SCHOOLS AND THE WAR.

When America entered the war the slogan of the schools became, "Win the war," and this determined purpose has since conditioned their every activity. Upon the declaration of war the school machinery of every State in the Union was placed at the disposal of the Federal Government which found in it a valuable means for the quick dissemination among the people of that information and instruction needed to develop and conserve an enlightened and unified public opinion. Efforts, too, of the pupils themselves were effectively enlisted in drives for liberty loans, thrift-stamp sales, and Red Cross aid; in increasing the production of food and the saving of it; and in harvesting crops where the labor supply was inadequate. Moreover, the content of practically every study in our curricula has

been profoundly modified by war considerations leading, indeed, to a vitalizing of work never before experienced by the schools of this country. A new significance, it can not be doubted, has been given especially to the teaching of history, civics, geography, language, and the sciences. The kindergartners of America also, responding to the new impulses, have not only organized and equipped a kindergarten unit and sent it to France to work among the little children of the devastated area and through plays, games, stories, and handwork are giving back to them the happiness of normal childhood but they are, as never before, cooperating with established social agencies employed in child conservation to the end that childhood in our own country may be saved from the blighting effects of war conditions.

PROBLEMS OF RECONSTRUCTION.

While the "Win-the-war" slogan still expresses the unalterable purpose of the schools, as of every other national agency, nevertheless it is recognized that consideration must more and more be accorded the problems of reconstruction. In this matter France and England have pointed the way, for not only have they adapted their schools to the exigencies of war, but along with these tasks they have not neglected to plan for and in part execute changes in their systems in anticipation of postwar conditions and the problems which the reconstruction of a changed world will entail.

With us, perhaps, the problem of first importance which must be faced, a problem which the war has thrown into sharp relief, is that of amalgamating our foreign born, transforming them into loyal, literate, and efficient citizens. The revelation of the 1910 census that there were 5,500,000 people in the United States who could neither read nor write attracted little attention, but the fact that of 10,000,000 registrants for the selective draft there were 700,000 who could not write their names and an equal number who could not speak English and who could not, because of a lack of a common medium, respond intelligently to military or industrial orders on the one hand, and to moral and spiritual appeals on the other, has aroused the Nation to the magnitude and importance of the problem as nothing else has ever done.

It is clear that this is, first of all, a problem of the schools, though the schools are by no means the only agency making for Americanization, and the teaching of the English language is the first step in the fusing process. While in the accomplishment of this task every bit of school machinery is needed, nevertheless opportunity for service knocks with particular distinctness at the door of the kindergarten, of the elementary day school, and of the night school. Upon these institutions there rests in unusual degree responsibility for giving the immigrant his first view of the customs, the thoughts, and

the ideals of the country of his adoption. As feasible steps in Americanizing the foreign-born there should be a law on the statute books of every State compelling every alien child, between the ages of 6 and 14, to attend the elementary day school for full time. There should be opportunity for every child of foreign birth, between the ages of 4 and 6, to attend a public kindergarten. Furthermore, wherever a group of 15 or 20 aliens beyond the age of 15 can be found who desire instruction, there should be established a night-school class equipped with all the materials essential to efficient work. In short, the important problem of peace as of war is the fusing of our racial groups, in the accomplishment of which the public school should set itself no less a program than that of providing adequate schooling for our entire foreign-born population, whether old or young, whether male or female, whether married or unmarried.

TEACHER SHORTAGE.

Inasmuch as the interpreters of America to the newcomers are of necessity the teachers of such classes it is of surpassing importance that men and women whose character and training are of the finest, and who appreciate the greatness of their opportunity, be enlisted in this work. A necessary prerequisite to securing teachers of the type desired is the fixing of salary schedules at a point which will enable teachers to live in reasonable comfort, and yet have a margin adequate to permit them to avail themselves of opportunities for personal growth; and with a margin, too, generous enough to make it possible for them to command that respect and recognition in the community to which the dignity and importance of their work entitle them.

If we fail to make such provision the work of our schools will suffer, through the impermanence of the teaching force. Indeed, already our schools are in grave danger of disorganization because the increase of teachers' salaries has lagged far behind the rise in the cost of living, on the one hand, and behind the advance in wages paid by industry, on the other. Again, large numbers of young men teachers have entered the Army. This depletion of the teaching force has in some parts of the country reached the proportion of a teacher "famine." Careful estimates based upon reports from nearly every section of the country would indicate that the actual teacher shortage may now reach an aggregate of 40,000. Reports indicate also that an unprecedented number of those now teaching are inexperienced, estimates fixing the number at a quarter of a million nearly. Clearly, then, the stabilization of the teaching force is demanded, not alone in preparation for the great work of Americanization which will be sharply accentuated after the war is over, but because the very

integrity of the school organization which has been built up likewise demands that serious consideration of this matter be not long delayed. Among the effective ways, surely, of checking teacher withdrawals are: The upward revision of salary schedules; providing increases beyond a given maximum which all can reach, for demonstrated efficiency and worth; and creating an adequate retirement fund, which will enable teachers to spend the years of declining age in peace and comfort and with honor.

SCHOOL ATTENDANCE AND SPIRIT.

Despite concerted effort to hold pupils in school there have been losses, particularly in schools of secondary rank. Many of the older boys have responded to the appeal of active war service and many others, comprising both boys and girls, have entered the industries tempted by the offer of high wages. However, it may be said that the measures taken to lessen the movement away from the schools have been effective, for the loss has not been nearly so great as many anticipated. Indeed, many schools report an actual increase in the number attending, though many individuals have left school before their work was completed. Moreover, superintendents are reporting that never before have pupils been so enthusiastic, so earnest, and so persistent in their work. In large measure this is due undoubtedly to the fact that teachers have approached their work with a greater earnestness of purpose, and also to the fact that they have incorporated a fresh content in practically every subject of school curricula.

CLOSER EDUCATIONAL RELATIONS WITH OUR ALLIES.

The latest example of the long look ahead toward closer relations, commercial and educational, which are sure to prevail among the allied nations, is furnished by the French High Commission, which has arranged to send a number of young women of high-school education to this country for intensive courses in our institutions. These young women, for the most part, are daughters of French officers who were killed in the war. It is probable that this group is but the vanguard of larger numbers, if this initial experiment proves to be a success.

As it is the wish of the members of the French High Commission that these girls have the opportunity of becoming acquainted with the home life of our people, it has been arranged that they are to be taken into representative homes and treated as members of the families rather than as boarders.

It has been suggested that after the termination of the war a reciprocal arrangement be entered into for an interchange of young

people between the two countries. If the plan is consummated, it will prove a powerful factor in binding together more firmly than ever before the people of these two Republics.

In another way this closer relationship with France is being brought about. In the devastated areas of France particularly many highly educated teachers have been obliged to relinquish their work and, in consequence, are available for appointment in this country, where teachers of French, or French in combination with other subjects, are needed.

The Bureau of Education in cooperation with the American Council on Education and the French High Commission has, by means of a circular letter, called attention to this opportunity. Immediate and generous response was made and calls came for nearly 200 such teachers. As fast as received these were placed in the hands of the French High Commission. The Paris agents of the commission are recruiting teachers for this service, and it is expected that many such will find their way into our schools and educational institutions.

THE GROWTH OF JUNIOR HIGH SCHOOLS.

The rapid growth of the junior high-school movement has been one of the striking features of the past year. Wherever a reorganization of the school system has been discussed, the organization of the junior high school has found favor. The reasons for its easy acceptance rest in part, to be sure, in the fact that its introduction involves no demoralizing change in the established school organization. Herein lies one of the dangers that must be recognized, for it is obvious that if the junior high school is to become anything more than a name it must involve a reorganization that is more than a mere regrouping of grades and classes; it must contain and conserve all those provisions for the educational guidance of the individual pupil in a wide, flexible, adaptable curriculum for which it was established.

It is not improbable that five years may see its inclusion in the majority of the schools of the country. Prof. Davis, of Ann Arbor, has investigated the junior high schools in the north central association territory, 1917–18, and has found that about one-fourth (2,931) of the accredited schools of the region contained this form of organization, and that about one-sixteenth (72) had been organized in 1917. The year 1918, Prof. Davis believes, will show an even greater increase. It is believed that the growth in the region for which he reports is typical of the whole country.

AMERICANIZATION THROUGH EDUCATION.[1]

Progress in the field of Americanization through education has been extraordinarily rapid. This has been due primarily to the war. Official and unofficial agencies which hitherto had never given any attention to the subject of Americanization were forced by necessity to deal with the subject. The attitude of the American people generally toward the population of foreign birth has been undergoing many and rapid changes. On the one hand, the evil of dual allegiance as expressed in hyphenated citizenship has brought home to the average American citizen the necessity of providing opportunities for the education and training of the immigrant in the American language, citizenship, and forms of living. Where before in the breast of many naturalized citizens had been slumbering almost complete allegiance for the land of their origin, an allegiance not apparent to Americans, under the pressure of war this hidden sentiment was brought to light. It was loudly condemned by Americans, and its existence once appreciated caused an impetus to be given toward the more fundamental training of immigrants in every aspect of life and citizenship in America.

On the other hand, it came to be seen that a united people back of the fighting line was indispensable to victory. Since a large proportion of our population was of foreign birth or of foreign parentage, special attention to the morale of this portion of our people became a war necessity. Persons of foreign birth were employed in our war industries; others moved forward to take the place of citizens drafted into military service. Upon their labor the entire country was dependent for food, clothing, coal, and war materials. Any break in or impediment to their support and allegience to this country and the cause of the allies meant the possibility of failure and perhaps ultimate defeat. Hence our internal line of defense had to be maintained at all cost. It is for these reasons that the cause of Americanization through education has gone forward rapidly.

This development of a national consciousness of the problem of Americanization and its many phases forced an organization and formulation of Federal plans and activities. This program is based on the results of four years of study of this subject by the Bureau of Education, and this bureau has been the principal agent in its presentation. It comprehended the promotion of school legislatio.., changes in the organization and administration of public evening schools and other facilities, modification in the instruction, methods, and subject matter, extension of facilities in factories and homes and the stimulation of public institutions, such as libraries and of unofficial organiza-

[1] Summary of chapter for the forthcoming biennial survey of education in the United States, by H. H. Wheaton.

tions, and finally a general coordinating and correlating of the many official and unofficial activities desiring to cooperate in a national program. On December 13, 1917, the Council of National Defense indorsed the activities being conducted by virtue of this program and on February 12, 1918, announced a general national program to be worked out through the State Councils of Defense and subsidiary organizations throughout the country.

Under this program, as set forth in Bulletin 86, the several States were urged to pass legislation requiring the attendance of non-English-speaking and illiterate persons between 16 and 21 years of age at some school or other recognized facility under public supervision. Incidentally they were urged to require communities with a substantial number of immigrants to establish evening schools for their education. Adequate appropriations were urged and each State having a substantial population of foreign born was urged to appoint supervisors of immigrant education to conduct the State program. Emphasis was laid upon the necessity of training institutions for teachers of immigrants and upon the necessity of improving the equipment of teachers for this kind of work through the proper preliminary instruction. State councils and community councils were urged to promote factory classes, to increase library facilities and to coordinate the varied activities of private and unofficial organizations and agencies.

Under this plan about 30 States have organized State committees on Americanization, 6 have appointed State directors of Americanization, while a number of others have secretaries of the committees on Americanization. At least 3 States have deputized existing departments or commissions to carry on the activities of the State councils in the field of Americanization. At the close of the fiscal year the national plan in conjunction with the States has gotten well under headway.

State boards of education or commissions have been especially active during the last two years. In June, 1917, the New York Department of Education appointed a State Supervisor of Immigrant Education, under whom has been organized a large number of activities in the many towns and cities of the State. The supervisor is charged with the direction of organization work, with the organization of teachers' training institutes and normal-school instruction, with the formulation of plans for industrial plants interested in the instruction of employees, with the supervision of camp schools, and with the preparation of courses, syllabi, and other material essential to instruction in English and civics. In Massachusetts the State board of education has organized a division of university extension, under which activities have been stimulated in many communities and methods of teacher training developed. Within the last year a

State supervisor of immigrant education has been appointed who is devoting his entire time to the subject. In California the commission of housing and immigration, in conjunction with the State department of education, has secured the passage of a Home Teacher act, providing for the bringing of the instruction in English and civics, personal hygiene, sanitation, and other appropriate subjects to the homes of the immigrants. Through the cooperation of the State Daughters of the American Revolution, the women's organizations of the State and other interested agencies, an experiment was conducted in San Francisco pursuant to the provisions of the act. Success has been marked and the plan is to extend the system of home instruction. The commission has also published pamphlets and courses of instruction in English and civics.

Great progress is noted in a large number of cities. Not only has the number of evening schools been increased in those communities already having such facilities for instruction, but the number of cities creating evening schools for the first time has very substantially increased. It is interesting to note, however, that while the number of opportunities for instruction has very largely increased, yet attendance has not been altogether satisfactory. Labor conditions, overtime work, and the pressure of war activities, coupled with anti-American propaganda, have very largely caused a decrease in the average attendance of immigrants upon public evening schools. This has caused the cities to redouble their efforts in publicity and the advertising of facilities. Many have published attractive posters and distributed handbills announcing evening schools, the subjects of instruction, and the location and hours. Supervisors of immigrant education have been appointed in Rochester, Detroit, Cleveland, Los Angeles, and other large cities. In some, assistant superintendents of schools have been charged with the responsibility for the immediate direction of evening schools, with particular emphasis upon the education of immigrants.

In New York City a unique experiment was tried in the line of social activities. The object of these activities, which comprehended dancing, lectures, entertainments, musicals, and other attractive forms of recreation and amusement, was to stimulate immigrants to come to the public schools and acquire the habit of making these the center of their recreation and amusement. At all of these places English was made the language of social intercourse. Many immigrants who would not otherwise have attended evening school were thus persuaded to join the classes in English and civics.

In Detroit an extraordinary campaign of publicity has been carried on by the board of commerce in conjunction with the board of education. The result was to increase very substantially the number attending. The cooperation of industrial plants was secured in

sending their employees to school or in establishing plant classes. Campaigns of a similar type were carried on in Buffalo, Rochester, Boston, Cleveland, Pittsburgh, and other places. In New York City, Detroit, Buffalo, Rochester, Boston, and Cleveland special courses in the training of teachers were conducted. In all of the cities mentioned in New York State these courses were conducted under the general supervision of the State department of education, which at the last session of its legislature secured an appropriation of $20,000 for the purpose of training the teachers of the State. Such training has been carried on to an extent in other States, such as Massachusetts and Connecticut, under the supervision of the State departments of education.

Legislation upon the subject of Americanization has made distinct, although not extensive, advance. In New York State the legislature at its last session passed three bills: One providing for the compulsory attendance of non-English-speaking and illiterate minors between the ages of 16 and 21 years at some public school, plant school, or recognized private school; a second providing for the compulsory maintenance of schools and classes in every community where 20 or more minors were affected by the preceding bill; and a third appropriating $20,000 for teacher training. In Arizona the governor made an attempt to secure the passage of similar legislation without success, but the legislature did pass a bill appropriating $20,000 to be expended in the nature of State aid for the establishment and maintenance of suitable facilities for immigrants. In Wisconsin the various acts relating to vocational education and part-time instruction were amended in such way as practically to require the attendance of non-English-speaking and illiterate persons upon some school as a preliminary to part-time instruction. Federal legislation was proposed by the National Committee of One Hundred. The proposed bills provided for a system of Federal aid to the several States, appropriating like sums for instruction in English, civics, and other subjects. The bills have been approved by a large number of State councils of defense, industrial establishments, school authorities, and others, and have been placed in the hands of the President for his consideration as administration measures related to the winning of the war.

The work of private agencies and unofficial organizations has been extensive. The Carnegie Corporation has entered into the field of investigation of the methods of Americanization. The national Americanization committee has continued its cooperative arrangements with the Bureau of Education and other agencies of the Federal Government. Pamphlets in foreign languages have been distributed by the Sons of the American Revolution, while other patriotic societies have distributed printed propaganda on the subject. The

Council of Jewish Women has been particularly active through its many branches. The Young Men's Christian Association has not only conducted its former classes in English and citizenship in the many associations throughout the country, but has assisted the War Department in carrying on instruction within the military training camps. The Young Women's Christian Association has conducted instruction in its international institutes in several cities, while the United States Chamber of Commerce has promoted the cause of Americanization through the local chambers of commerce and through the many industrial establishments employing foreign-born labor. Over a hundred chambers of commerce have appointed Americanization committees and are now engaged in cooperating with school boards and other agencies in the stimulation of attendance and in the establishment of adequate and proper facilities.

Some improvement has been noted in the subject matter of instruction. It is coming into the consciousness of school authorities and teachers that instruction of immigrants in English and civics must be preeminently practical, hence new courses and material have been created for the use of teachers in the schoolroom. More distinct advance is seen in the actual methods of instruction. The dramatic theme method has become popular and seems to be making the most decided impression on school authorities and teachers. Greater attention is now paid to the advertisement of evening schools through posters, handbills, and through supplementary agencies. Correlation and coordination of the efforts of organizations of the foreign born, as well as the native born, have been emphasized more particularly during the past year. A large number of industrial plants have established plant classes, while most of those which have had facilities for some years have continued their maintenance. Conspicuous among these plants are the Ford Motor Co., which has maintained a very large school for non-English-speaking employees for over three years; the D. E. Sicher Co., New York City, where the classes have been annexed to the nearest public school; the Joseph & Feiss Co., of Cleveland; the Packard Motor Co., of Detroit, and many others.

The most significant aspects of the progress made have been the increased consciousness of the American people of the necessity of Americanization, the effort to provide practical instruction, and the increased cooperation among official and unofficial agencies.

EDUCATIONAL LEGISLATION.

As reflected in State legislation, educational movements of the year have not been especially conspicuous, either for new developments or for quickened pace along older lines of progress. There were only eleven regular sessions of legislatures in 1918, and the European war was no doubt uppermost in the minds of many of

those lawmakers who were in session. The war, however, has already left an impress upon educational legislation as upon everything else, although most legislatures of 1917 had adjourned or were at the point of adjourning when war was declared. By the time of the assembling of legislative bodies in 1918, the war spirit had taken thorough hold of the people. School legislation, in consequence, hardly escaped its effect. This is seen in the enactment of laws looking to the Americanization of aliens and the elimination of illiteracy among native Americans, the provisions for instruction in patriotism and the commemoration of patriotic days and events, stronger emphasis on physical training in the schools, emergency measures for the increase of teachers' pay, and similar measures.

The new laws designed to promote patriotism generally took the form of a requirement that patriotic instruction and exercises be incorporated in the curriculum and, in the absence of previous law on the subject, provision for the display of the United States flag on the schoolhouse or grounds. New York and Texas were among the States which made provision for patriotic instruction. In the former, the older law left to the option of the school board the inclusion of patriotic lessons in the curriculum; the new law requires instruction in patriotism in all schools, private as well as public. The Texas law, enacted at a special session of the legislature held in 1918, requires every public-school teacher to devote at least 10 minutes each school day to instruction designed to inculcate "intelligent patriotism."

The display of the United States flag on or near every public-school building is required in about three-fourths of the States.

The elimination of illiteracy and the Americanization of aliens engaged the attention of the legislators of several States during the year. Among these were Arizona, Kentucky, Mississippi, and New York. The State last mentioned attacked the problem from three directions. A law known as the "Lockwood law" authorizes the establishment of institutes in the normal schools and in cities for the purpose of training teachers to give instruction to adult illiterates. A second law requires attendance at either day or evening school of all minors between 16 and 21 years of age who do not possess such ability to speak and write the English language as is required for completing the work of the fifth grade of the public schools. A third law requires the maintenance of evening schools in cities of the first, second, and third classes and in union free school districts under certain prescribed conditions.

After the outbreak of hostilities in Europe a strong impetus was given to physical training in the public schools of this country. This is evidenced by the enactment of the laws of New York and Louisiana in 1916 and by the adoption early in 1917 of provisions for physical

training in all schools or for military training in high schools, or for both, in Arizona, Indiana, New Jersey, Oklahoma, and Oregon. Since the entry of the United States into the war, California, Michigan, Rhode Island, and Maryland have enacted similar laws. That of the last-mentioned State was enacted in 1918. According to the provisions of this law, physical training must be provided in all public schools and schools receiving State aid. The State board of education is directed to regulate such training and to appoint a State supervisor of physical training and such assistants as may be deemed necessary.

The rapid rise in prices due to war conditions and the concomitant increase in pay to industrial workers and other wage earners made necessary an effort to adjust teachers' salaries to these new and appreciably abnormal conditions. The efforts of local school authorities to meet the emergency are, of course, not shown in State legislation, but in several legislatures which have been in session this year the matter has received consideration. New laws fixing minimum salaries that may be paid public-school teachers were passed by the legislatures of Kentucky, Maryland, and Massachusetts. In Wisconsin, where a special session of the legislature was held, cities of the first class were authorized to levy an additional tax for the purpose of paying more salaries to teachers during the period of the war and for one year thereafter. South Carolina provided for the establishment, in the office of State superintendent of education, of a bureau for the registration and employment of teachers.

Some other measures upon which the war doubtless exerted an influence were, (1) the law of New York requiring teachers to be either American citizens or persons who have taken proper steps to become such; (2) the law of New Jersey to permit any pupil in the senior year of a public educational institution who is inducted into the military or naval forces of the United States to graduate, if he has completed his work up to the time of such induction; and (3) the bill passed in Kentucky which was designed to prohibit teaching the German language in the elementary and high schools of the State. The Kentucky measure, however, was vetoed by the governor.

There were, of course, many laws enacted in 1918 in which the "war impulse" was not dominant or in the enactment of which military considerations were of small consequence. Three groups of enactments are of sufficient importance to warrant notice here. These are compulsory attendance laws, provisions for the better financial support of schools, and acts relating to vocational education.

Beginning with the enactment of the Massachusetts law in 1852, the movement in America for compulsory attendance at school has

gone on apace for over half a century. The provision for required attendance has spread to the Pacific Ocean and to the Gulf of Mexico, and where it has been in force for years there is still a tendency to make stronger its hold on the ground which it has gained. These facts have added significance now that Mississippi, the last of the States to enact such a law, has made provision for compulsory attendance by act of 1918. All of the 48 States now require attendance at school for some period of years of the child's life and for all or some part of the school term. The new Mississippi law carries a local-option feature; that is to say, it is to apply only in counties and independent school districts wherein it is adopted by vote of the qualified electors. Three other States—South Carolina, Georgia, and Florida—have provisions in their attendance laws which are in effect local option in character. Other noteworthy attendance laws of 1918 were the Massachusetts act further regulaing the maintenance of county truant schools, the Kentucky act extending to magistrate's and police courts jurisdiction in cases arising under the attendance law, and the Virginia act making State-wide the application of its law.

One of the most significant features of progress in school administration during recent years has been the trend toward a unit of administration and support which shall be larger than the local district. Evidence of the presence of this trend in the legislatures of 1918, especially with regard to school support, is unquestionable. In Louisiana five amendments to the constitution were proposed, all of which were designed to make more stable the State's system of school support and, particularly, to shift the burden more from the local community to the county and to the State. In Virginia, the State school tax levy was increased from 10 to 14 cents on the hundred of property valuation, and $100,000 was added to the annual appropriation. The lower house of the Georgia Legislature increased the annual school appropriation of that State from $3,200,000 to $4,200,000, and this large increase remained in the bill until 3.10 a. m. of the last night of the legislature, when the increase was reduced in conference committee of the two houses from $1,000,000 to $300,000. In Massachusetts and Maryland, like tendencies to add to the State's share in school support were in evidence.

The movement for industrial education which began in this country more than a decade ago and culminated in the enactment of the Smith-Hughes Act of February 23, 1917, providing Federal aid for vocational education, was up for consideration in some of the legislatures of 1918 which had not previously considered it. The lawmakers of Kentucky, Louisiana, Maryland, Rhode Island, and Virginia accepted the provisions of the act. All other States have

not met, in part at least, the conditions prescribed by the Federal Board for Vocational Education and are entitled to the benefits of the act under its provisions.

RURAL EDUCATION.

Progress in rural education throughout the nation, while not decisive nor marked by any great advance in any one phase, has been continuous in a variety of activities. The war emergency has emphasized the educational requirements of modern agricultural communities and has accentuated the marked weaknesses in our rural school system. The general public is realizing the necessity of reorganization of the provisions made for education in the country.

Administration of rural schools.—The problem of education in rural communities has attained too great a magnitude to be left entirely to purely local control and support. A larger unit of administration, preferably the county unit, with modifications which adapt it to local conditions, State cooperation and financial aid for the development of rural education are reforms rapidly materializing in many States. During the year New Mexico adopted the county unit for all school purposes, making the nineteenth State organized wholly or in part on that basis.

Professional supervision of rural schools.—Some real progress has been made in many States toward professional supervision. State and county departments of education have added to their regular staff. Washington, Montana, and Vermont are among those States which provide State supervision of rural education, and Maryland, Kentucky, and West Virginia have devised plans for increased supervision of rural schools under county direction.

In Maryland provision has been made by which each county with 100 teachers or more will have at least one specially trained supervisor in addition to the county superintendent, the attendance officer, and the statistical clerk.

Kentucky has recently introduced professional supervision for both white and colored schools. At the present time 32 white supervisors are engaged in 24 counties, and 18 colored supervisors in as many counties.

West Virginia was one of the first States to subdivide its counties for supervision purposes and now has as many as four supervisors in certain counties.

Increased financial support.—The country needs progressive legislation to procure more equitable taxation and at the same time to provide more liberal support for schools in rural communities. Higher State and county, as well as local taxation, must be resorted to. Practically all the States that make use of State taxation and appropria-

tion for school purposes have been obliged recently tc increase the amount greatly, and county and local communities have done likewise.

Maryland increased its State appropriation in 1918 from $1,750,000 to $2,000,000, and in addition provides bonuses of from $50 to $100 to teachers who remain in their schools throughout the year. North Dakota has increased the amount of State aid for standardization and consolidation of rural schools from $120,000 to $225,000. Other States are doing as much or more than these.

Teachers' salaries.—The unprecedented opportunity in industrial activities due to the war threatens a serious exodus from the teaching profession, especially in the rural field. Many States have taken steps to increase teachers' salaries liberally, but even larger increases will be necessary to keep the best men and women in the schools. The following are some of the increases in salary lists reported for 1918:

Maine increased salaries about 25 per cent.

In Montana few schools pay less than $70 per month in rural communities, with the majority ranging from $85 to $100 per month for experienced teachers.

In Maryland minimum salaries increased in 1918 from $600 to $800 for high-school teachers. The following schedule prevails for elementary teachers according to length of experience:

Grade of certificate.	Beginning teachers.	3 years' experience.	5 years' experience.	8 years' experience.
Third	$400	$425	$450	$475
Second	450	475	500	525
First	500	525	550	600
Principal	550	575	600	650

Kentucky has recently passed a minimum-salary law giving teachers of the second class $45 per month, teachers of the first class $55 per month.

In Pennsylvania the following minimum salaries have been adopted: Professional certificate, $45 per month; professional and normal certificate, $55 per month; permanent certificates, $60 per month.

Washington increased salaries from 15 to 20 per cent. Teachers are generally engaged 12 months in the year.

In Wyoming rural teachers' salaries range from a minimum of $70 to $90 per month and a maximum of $100 to $125 per month.

Vermont increased salaries during the year 12 per cent. Teachers are almost invariably employed by the year.

Organization of rural schools.—Improvement of the one-teacher school through standardization, where the centralization movement

is impracticable; specially prepared teachers; the all-year school accompanied by an increased number of teachers' cottages and a better type of school consolidation, characterized the progress made in rural school organization during the year.

One of the most comprehensive score cards for rural school standardization yet devised was published in the Kansas State Agricultural College Bulletin of June, 1918. The score card gives 1,000 points for perfect plant and an additional 1,000 points for teaching equipment and efficiency, subdivided as follows:

	Points.
Site	235
Buildings	445
Service and equipment	320
Teaching equipment	500
Special activities	200
Efficiency plans and provisions	300

Real progress is being made in the construction of houses for teachers. The State of Washington reports 196 teachers' cottages erected and more under way. Wyoming reports that many cottages have been erected during the year. Texas now counts upward of 200 cottages and several other States are accomplishing almost as much.

Consolidation.—Experimentation in school consolidation has passed and the movement is accepted as good national policy. There are about 10,500 consolidated schools in the United States in 1918 resulting from the centralization of two or more schools. The new schools are organized with a view to preparing for the new agricultural era a permanent farming population trained for farm work, and at the same time having high ideals of citizenship. The following gives some idea of the progress made in a few of the States from which reports were received in 1918:

Maine reports many schools closed during the year, conveying the children to stronger and better schools. South Dakota, a State in which school consolidation is of recent origin, reports 42 new consolidated schools. Maryland and Kentucky depend more on closing small unnecessary schools and conveying the children to larger one and two teacher schools. Kentucky thus far has 79 consolidated schools, 12 of them with transportation, but it has 1,084 rural schools with two or more teachers. In New Mexico school consolidation is progressing rapidly in the irrigated sections, where many large consolidated schools have been organized during the past biennium. Washington has increased the number of its consolidated schools to 23. North Dakota has opened 52 consolidated schools and voted 60 new consolidations during the year. The total number of consolidated schools in actual operation is 447. West Virginia has 120 consolidated schools, 20 of which were organized in 1918. Penn-

sylvania reports 715 schoolrooms closed as result of consolidation in the past 10 years, of which 684 were one-room schools. Six thousand two hundred and one children are transported to these schools in 326 vans, coaches, or wagons. In Iowa 235 consolidated districts were organized up to June 30, 1917. Two hundred and forty-five thousand dollars was expended as State aid for consolidation.

Rural high schools.—There is a decided movement throughout the country to establish rural high schools of an agricultural type in the open country or in the rural villages. Some States are finding that the solution of rural school organization will probably be the adoption of some form of the junior high school. In West Virginia the State board of education has recently adopted a sweeping 6, 3, 3, plan for the organization of all the schools of the State. In Vermont, the State Commissioner of Education, Dr. Milo B. Hillegas, reports that the 12 junior high schools in operation during 1916–17 were eminently successful and the number will doubtless be extended.

The rural school course of study.—Some States, notably Louisiana, are beginning to plan distinctive courses of study for the rural schools. A number of committees have been organized, or are being organized, for the purpose of making a fundamental study of the entire field of rural education. Columbia University, through its rural education department, is conducting such a study. This embraces a plan of cooperation between teachers' college and two New Jersey counties, the schools of which will be used as practice schools and study laboratories for the development of teaching practice and course of study for rural schools.

Professional requirements.—Maine, Vermont, Oregon, Washington, and Michigan have increased the professional requirements for teachers during the year. The requirement of a four-year high-school course and at least one year of professional training in addition thereto, as recommended by the United States Bureau of Education, has been adopted in several sections of the country. Wisconsin, Indiana, and Maryland are among the States which base their salary scales on the degree and kind of professional preparation and tenure in the same community.

Schools preparing rural teachers.—The real hope of the country for an ample supply of well-trained rural teachers rests with the public normal schools. Many of them have reorganized their work to meet the demands for the new type of rural teachers. Up to the present time 122 rural school departments have been established in the normal schools. Altogether, 84 of these departments make use of rural practice schools; 97 other normal schools offer specific courses for training rural teachers during either the regular or summer sessions.

TEACHER TRAINING.

In common with that of other higher institutions of learning the work of the teacher-training schools was extensively modified by war conditions. Decreased attendance in both regular and summer sessions and an almost complete lack of men students are reported from a majority of these institutions for the year 1918. The courses have been materially changed; many institutions offering courses intended directly to qualify for certain kinds of war work. Practically all have devoted time usually given to social and other extramural activities to Red Cross, Young Men's Christian Association, Liberty loan drives, and the like. In most instances teacher-training institutions have aimed to qualify their students better to take an active part in community war work and to interest and instruct the children under their charge in the Nation's war aims and activities.

In general, building is entirely suspended for the period of the war. Two institutions report enlarging the school plant, but as a rule necessary improvements only are made. One new State normal school is reported as opening its doors during the year. Three institutions report new buildings, two of which were practice schools and one a model rural school erected on the campus for practice and observation work.

Summer schools are increasing in usefulness as well as in length. Four normal schools report the adoption of a 12-week summer school, which is one of four sessions into which the school year is divided. In many instances enrollment in summer schools has increased in spite of the adverse conditions prevailing.

There is a growing appreciation of the value of extension work in teacher training and of the need of extending facilities for increased professional training to teachers in service. One institution reports adding to its rural school department an extension agent who is devoting his whole time to this phase of the work. Nine additional institutions report the establishment of new or improved extension activities. Several of these send out books, Victrolas, Babcock testers, and the like, to be used in rural schools. One institution reports 310 teachers enrolled as students in its extension division.

Nine teacher-training institutions report the establishment during the year of specialized departments for training rural and agricultural teachers. As a rule some method of providing practice teaching facilities has been adopted, the kind varying in different States with local conditions and school facilities. Teachers' cottages often are erected in connection with the separate practice schools.

Most encouraging progress is reported in regard to advanced education and professional requirements for certifying teachers and for entrance to normal-school courses. More and more emphasis is

placed on attendance at professional schools and less on academic examination in the certification of teachers. Two States, North Dakota and Louisiana, are no longer renewing certificates on examination only. In two States laws have been passed requiring all applicants for certificates to have education equivalent to graduation from a four-year standard high school and nine weeks' additional professional training. These laws go into effect in 1919 and 1920. One State offers a bonus for teachers having two years' professional training in addition to graduation from a four-year high school.

Several institutions are lengthening their courses from two to four years. In general the four-year courses lead to the A. B. degree.

In many schools household economics and agriculture are receiving renewed attention. An interesting experiment is reported from the State normal school at Arcata, Cal. The plan is to place all of the rural schools in three counties under the direct supervision of members of the faculty of the normal school. In the county in which the school is located the faculty members are to spend two days a week in this supervision. In the two counties more remote more than half the time of the instructors is given to the work.

A large number of teacher-training institutions report modification or enlargement of their courses to meet the requirements of the Smith-Hughes law in order that they may secure the Federal appropriations made available under its provisions.

EDUCATIONAL WORK OF THE CHURCHES.

The most significant tendency of the year in the educational work of the churches, greatly stimulated by the war, has been the increasing cooperation of all the interests in the field of religious education. Within particular denominations there is a definite tightening of the bonds uniting educational institutions. During the year the Protestant Episcopal board has strengthened its college department; the Presbyterian Church in the United States of America is consolidating its various educational interests under a single board; the Methodist Episcopal Church South is expanding the work of its board of education and organizing its colleges in an association; and the Reformed Church in America is projecting a survey of its educational interests.

The extent of interdenominational cooperation may be estimated from some of the activities in which the various churches have joined forces. At the present time colleges of most of the Protestant denominations, together with many Catholic schools, are combining much of their advertising under the leadership of the Council of

Church Boards of Education, various State associations of colleges, and State Councils of Defense, and the National Council on Education, which conducted an emergency campaign from Washington in 1918. The various church boards of education have combined their educational survey work and investigation in a single department.

The Council of Church Boards of Education, the Christian associations, and the church workers in State universities held a joint meeting during the year and considered especially the religious work in State institutions. The same organizations united in a Nation-wide campaign to accomplish the Northfield program of 200,000 college students in Bible study during the year. There have been special gatherings of those interested in college Bible departments, standards of Sunday-school work, cooperative purchasing, preparation for the ministry, and the relation of colleges to the war.

The higher institutions, including those under denominational control, suffered severely during the year through loss of students, faculty, and revenue. Many of them placed their facilities at the service of the Government for war work. In so far as they could secure military instructors, the denominational institutions introduced military training, and during the coming year units of the Students' Army Training Corps will be established at most of them.

Comparatively few of the denominations maintain elementary parochial schools. The great majority of such schools in the United States are under the control of the Catholic and Lutheran Churches.

The Catholic Church in the United States consists of 14 archdioceses and 87 dioceses. Each of these divisions has its elementary schools, which continue to grow in number and attendance. In 1917–18 the total number of such schools was 5,748, a gain of 151 over the number for the preceding year, and the number of pupils in attendance was 1,593,407, an increase of 95,060.

The number of supervisory officers is increasing very rapidly. This is due largely to the increasing number of community inspectors appointed in recent years. These inspectors are members of their teaching communities, appointed to supervise the schools of their respective communities. Many of them cover a wide territory in their work, while others are limited to the schools of their community situated in a particular diocese. The number of Catholic high schools accredited by the Catholic University of America has increased to 144.

LIBRARY ACTIVITIES.

Libraries and the war.—Upon the declaration of war by the United States the librarians of the country immediately became concerned to

determine how they might best serve the Nation in this crisis. The outcome has been the cooperation of practically every library in the country to a greater or less extent in a program of war service which may be outlined under the following heads: As an agency of war publicity for the Government; work in behalf of the food campaign; cooperation in liberty-loan and war-savings campaigns; aid to the Red Cross, Young Men's Christian Association, and other agencies of war relief; Americanization of aliens; and providing library facilities for soldiers. This last service has been rendered directly by libraries adjacent to camps, hospitals, and stations, and in general by the cooperation of nearly all librarians in the corporate war work of their professional organization, the American Library Association. It has also been recognized that it is a function of the library to uphold the spirits of the people by supplying literature clearly presenting American ideals, and also expressing the great universal principles which serve for encouragement in sacrifice and consolation in bereavement. In addition, the general educational facilities of the public library serve in both war and peace to raise the standard of efficiency of the people to meet their practical responsibilities.

The war has affected the budget of the libraries in two ways—by diminishing their income, because of decreased appropriations, etc., and by reducing the purchasing power of the income actually received. The problem of service is also pressing, because of the inroads made on the library staffs by war conditions. The libraries of the country, in common with other institutions, consequently labor under serious economic difficulties, which have obliged many libraries to curtail their activities. Some communities have even proposed to close their public libraries during the war, but against this course it may be urged that the reasons which advise the continuance of school and college sessions in war time also apply to libraries.

War service of the American Library Association.—At the Louisville conference of the American Library Association, in June, 1917, a war-service committee was constituted, in accordance with a recommendation presented in the report of a preliminary war-work committee appointed soon after the entrance of the United States into the contest. The war-service committee was empowered to devise methods by which the association might aid in providing reading matter for the soldiers and to solicit funds for the erection and equipment of camp libraries.

A few weeks thereafter the commission on training-camp activities requested the American Library Association to assume responsibility for providing adequate library facilities in the 32 cantonments and National Guard training camps soon to be opened. The acceptance of the invitation from the commission placed the war-service committee in direct official relations to the Government through the War

Department. The committee began work at once collecting books and making plans and arrangements, basing its operations at first on volunteer service and on a few thousand dollars contributed by members of the American Library Association. While awaiting the building of camp libraries the books were distributed through the Young Men's Christian Association and similar agencies.

During the last week of September, 1917, a national "million-dollar drive" for funds was held, which succeeded in raising approximately $1,500,000. In the campaign for this fund the war-service committee was assisted by a library war council composed of nationally known citizens appointed by the Secretary of War. Further provision for the work was made by a grant of $320,000 from the Carnegie Corporation for the erection of camp library buildings, at a maximum cost of $10,000 for each building.

The raising of the fund made it possible by October 1 to unify the work in a single office, under a skilled executive with a paid office staff, and to proceed with an extensive program of activities. Headquarters for the war-service committee were established in the Library of Congress, at Washington, and Herbert Putnam, Librarian of Congress, was made general director. This centralization has given the work a special impetus. For the shipment of books for overseas service dispatch offices were established at the principal ports of embarkation, and each office was provided with a suitable stock of books and facilities for sorting, casing, and delivery. Librarians were appointed for the camps, generally from the younger men of experience in library work. By the spring of 1918 a larger supply of gift books became necessary, and accordingly in April an intensive campaign was undertaken to secure them. This campaign resulted in the immediate collection of more than 3,000,000 volumes, most of them suitable for use.

By the end of June, 1918, 36 camp library buildings had been erected and 42 large camps had trained librarians and complete library service. There were 150 librarians in the field. Books had been supplied to numerous hospitals, marine and naval stations, vessels, and small military camps and posts, including aviation camps. Nearly 300,000 selected books had gone overseas through six dispatch offices. The number of books purchased was over 400,000, largely technical, and more than 2,000,000 gift books had been sent to camps and stations. In addition, about 5,000,000 magazines had been distributed, many of which were received under the 1-cent mailing privilege.

Standardization of libraries and certification of librarians; library salaries.—In common with schools and colleges, the libraries of the country have taken up the problems of standardization and certification as applied to their own institutions and service. The Ameri-

can Library Association has a committee at work on this subject, which reported at the Louisville conference in 1917 and was continued for further study. In its report the committee considered chiefly the classification or grading of libraries; nomenclature, or the title of positions; and certification of librarians. The subject of standardization of libraries includes the titles pertaining to particular positions, grading of library staffs, certification of librarians, efficiency records, hours of service, promotion schedules, salaries, and pensions. There is considerable controversy among library administrators regarding the wisdom of placing library employees under the State or municipal civil service, as has been done in some places.

Library salaries, always meager, have been rendered still more inadequate by the recent marked increase in the cost of living. The situation has been felt with especial keenness in New York City, Philadelphia, and Boston, where the junior employees of the public libraries, in the hope of improving their economic condition, have formed unions affiliated with the American Federation of Labor. Plans for increasing library salaries are under consideration by the authorities of these cities. The Chicago public library board granted liberal increases to more than 400 of its employees, available May 25, 1917, and some other cities have done likewise. The lowness of salaries is causing a dangerous shortage of library assistants throughout the country, which threatens to lower the standard of library service. A warning against this danger has been issued in a recent letter addressed to library trustees and librarians by a committee of the Association of American Library Schools.

Library legislation.—The State legislation of 1917 shows a general tendency to extend the scope of library work into new fields and to provide more generously for its maintenance. In many cases the existing library law was amended. Important subjects of legislation were county libraries, legislative reference bureaus, and coordination of the work of county and city libraries. The most significant and most complete county library law of the year was enacted by Indiana. The Michigan Legislature of 1917 authorized the creation of county libraries, and Montana, North Carolina, Oregon, South Dakota, and Texas also passed important county library laws. Pennsylvania enacted a new general library law, including among its provisions an authorization of county libraries. A bill passed by the Ohio General Assembly providing for county district library service was vetoed by the governor.

New library buildings.—The year has been marked by activity in library building, notwithstanding the many unfavorable conditions at present for such work. Among the structures erected or in progress the following may be mentioned: Detroit Public Library,

corner stone laid November, 1917; San Francisco Public Library, opened in 1917; Sacramento Public Library, opened April, 1918; Indianapolis Public Library, dedicated on the birthday anniversary of James Whitcomb Riley, October 7, 1917; St. Paul Public Library, also dedicated in October, 1917. Work on the new building for the Philadelphia Free Library was suspended because of legal complications. The buildings of the Forbes Library, Northampton, Mass., and of the Public Library of Kansas City, Mo., were remodeled during the year.

Amherst College dedicated its new Converse Memorial Library building in November, 1917. The library building of the University of California was greatly enlarged during the year, and a library building was in course of erection on the campus of Leland Stanford Junior University. Work was begun on a new library building for the University of Oklahoma at Norman. Plans were inaugurated for a new building for the University of Wyoming library, and the contract was let for the construction of a large library building for the Peabody College for Teachers, Nashville, Tenn.

Library association meetings.—The American Library Association has continued to hold its annual conferences without interruption by the extraordinary conditions due to the war. These war-time conferences have naturally been chiefly devoted to the consideration of library war service in which those attending displayed their very earnest interest. The attendance shows a falling off from the figures of the immediately preceding conferences, but is large in view of the impediments in the way, especially expensiveness and difficulty of travel. The thirty-ninth conference was held at Louisville, Ky., June 21–27, 1917, with a registration of over 700 persons. The fortieth conference, at Saratoga Springs, N. Y., July 1–6, 1918, with about 600 in attendance, largely leaders in the profession, was even more than that of Louisville a war gathering. A conspicuous feature of the meeting was a numerous group of librarians in service uniform from camp, hospital, and dispatch service. William Warner Bishop, librarian of the University of Michigan, was chosen president of the American Library Association for 1918–19. The various State library associations have also maintained their usual meetings during the past year for consideration of current professional subjects.

PORTO RICO.

The work of the schools has been greatly handicapped through conditions brought about by the war and the prevailing low salaries of teachers. The department of education lost many of its most efficient men, who went into military service, and the changes in the teaching corps were frequent. The rural teaching force had 730 changes; the city of San Juan had 110.

In spite of these obstacles the work of the schools has been characterized particularly by the various activities carried on by supervisors, teachers, and pupils toward promoting the success of the United States and its allies in the world war.

Special attention has been devoted to increasing the food supply. There have been established 1,312 rural school gardens, 83 urban school gardens, 5,548 urban home gardens, and 21,145 rural home gardens.

For the promotion of community and war propaganda there were organized 1,177 committees for the promotion of agriculture, which conducted 2,380 public meetings; 831 parent associations held 1,297 public meetings; teachers made 60,038 visits to rural homes and cooperated with the Food Commission in conducting 2,157 rural conferences for enlightening the public on the issues of the war and the promotion of agriculture. During conservation week the schools conducted over 2,000 meetings and secured 122,826 pledge cards. The thousands of home visits and public meetings have made a lasting impression on the people. The gospel of food economy, of increased production, of improved methods of cultivation, and the need of planting a greater variety of products has been preached to the remotest rural barrio.

War literature was introduced into the schools and instruction given in patriotism. Among the literature used were Lessons in Community and National Life, Democracy To-day, and How the War Came to America.

The course of study in home economics, including both cooking and sewing, comprised four years of work, extending from the seventh through the tenth grades. Owing to changed living conditions due to the war, the course in practical cooking was changed entirely with a view to instructing students and their families in a diet that would make use of local food products. Mothers' classes taught in Spanish were conducted by teachers of home economics for two hours once a week, and neighborhood evenings were held once a month in the home-economics rooms, where subjects relating to home and community life as affected by the war were discussed.

Since the United States entered the war the department of education and the University of Porto Rico has lost 233 of their best men by their entering the military service. Of these, 10 were supervisors of schools, 12 instructors in the university, 4 high-school principals, 10 high-school teachers, 5 school-board members, 18 manual-training teachers, 13 teachers of English, 2 special teachers of agriculture, 49 graded teachers, and 110 rural teachers.

The school population of Porto Rico is 427,666, of which number 215,819 are of compulsory school age, i. e., between 8 and 14 years. The total enrollment in all the public schools was 142,846, or 33.1

per cent of the population of school age. Of these, 84,570 were enrolled in rural schools, 50,060 in elementary urban schools, 3,346 in secondary schools, 3,613 in night schools, and 1,257 in the University of Porto Rico. There were enrolled also in private schools 7,248 children.

The schools of Porto Rico were conducted in 1,712 buildings, having 2,845 classrooms. Of these buildings 540 are public property and 1,172 are rented; 316 are situated in urban centers and 1,396 in rural barrios; 58 new buildings were completed during the past two years, 17 buildings with 141 rooms in urban centers and 41 buildings with 49 rooms in rural centers.

The total amount expended for educational purposes during the year was $2,365,260.99, a per capita expenditure per pupil of $12.63 for elementary education and $41.92 for secondary education.

Important changes in the graded schools are the teaching of English on a strictly oral basis in the first three grades, the introduction of specially prepared textbooks in arithmetic, formal instruction in moral and civic training, for which purpose a special pamphlet has been issued. The improvement in the primary grades as a result of a better coordinated system of teaching such subjects as Spanish, English, writing, and arithmetic in closer harmony with the needs and the life experience of Porto Rican children has everywhere been remarkable. Much of this improvement is the result of the use of specially prepared textbooks in which the standpoint of the Porto Rican child, his experience, and his needs are given due consideration.

HAWAII.

During the past two years the school enrollment has increased from 30,205 to 34,343. The great diversity of nationality of races found in the public schools is indicated by the following figures:

Hawaiian	3,216	Porto Rican	1,032
Part Hawaiian	3,805	Korean	409
American	849	Spanish	489
British	108	Russian	125
German	126	Filipino	626
Portuguese	5,001	Other foreigners	151
Japanese	15,101		
Chinese	3,305	Total	34,343

The number of teachers has increased from 804 in 1916 to 967 in 1918. The problem of obtaining well-qualified teachers to fill the many vacancies caused by resignations and the creation of new positions is a serious one, as the normal school at Honolulu graduates only about 50 yearly. The situation has been aggravated this year by the resignation of an unusually large number of teachers, due to war conditions. Some teachers are secured annually from the

Pacific Coast States, and this year it is estimated that it will be necessary to obtain about 150 teachers from that source. Conditions in many of the country schools have been improved by the erection of teacherages, so that now practically every school in the Territory, with the exception of those located in Honolulu and Hilo, has on its grounds cottages for the teachers, and it is now possible to secure a better class of teachers for those schools.

Continued emphasis is placed on vocational training, although, owing to war conditions, it is veering to some extent from the shop to the field and garden. Nearly all the large schools have well-equipped shops in charge of specially trained teachers. They also conducted school and home gardens on a large scale even before the war began. In no place in the Union is self-help, particularly as expressed in the home garden, as important as it is in Hawaii. Every ton of home-grown product means the saving of a 2,000-mile haul by steamer from San Francisco. Practically every school in the Territory has a school garden and practically all the school children who have attained suitable age have home gardens as well; the pupils of 132 schools have 9,692 home gardens.

The school children have taken an active part in the activities occasioned more or less directly by the war, such as war saving stamp campaigns, Liberty bonds, Red Cross, etc.

CANAL ZONE.

The enrollment of pupils in the public schools of the Canal Zone is increasing gradually, the number enrolled during the year being 2,774. Of this number 1,764 were white and 1,010 colored. There were employed during the year 65 white and 15 colored teachers. The entrance salary for grade teachers was increased from $95 to $104.50 per month; high-school teachers from $120 to $132; science and mathematics teachers from $145 to $159.50. The total expenditure for schools was $140,000, an average cost per capita of enrollment of $50.83.

Junior Red Cross work was carried on extensively in the white schools and a Junior Red Cross Auxiliary was organized in each white school. Junior four-minute men speaking contests were carried on successfully in connection with the work in English. "Lessons in Community and National Life" and thrift and war-savings problems were incorporated into the work of the schools in such subjects as arithmetic, reading, history, English, geography, and current events.

VIRGIN ISLANDS.

There are three classes of schools in the Virgin Islands—public, denominational, and private. Public schools are maintained in the

towns of Charlotte Amalie, Frederiksted, and Christiansted. Outside of these towns the country schools are conducted by the Moravian Church and are aided by subsidies from the local treasuries. A private high school in Christiansted also receives municipal aid. The great need in these islands is for schools providing instruction above the elementary stages along practical lines, such as agriculture, trade, and business. A normal school is also needed, so that native teachers may be developed under American instructors.

PHILIPPINE ISLANDS.

Beginning with the school year 1917–18 all schools where a course in farming is given are to be in session throughout the year. This is not entirely a new venture, as for several years all settlement farm schools and most agricultural schools have been in continuous session, and notwithstanding the younger pupils enrolled in them these schools have maintained the best farms.

The calendar year has been divided into 42 weeks of classroom work, 4 weeks of special field practice, 4 weeks of vacation, and 1 week each for examinations and an annual cleaning up. Each pupil enrolled will be given a vacation of four weeks at the time in the year that the farm activities can best spare his services. All teachers assigned to farm schools are required to render service throughout the school year, except that short vacations may be given when their services can be spared.

It is believed that students should be detailed to definite projects and thereby become factors in a productive enterprise. Each pupil is expected to do fieldwork for not less than four consecutive periods (160 minutes) each day for 5 days a week, and daily fieldwork up to 3.5 hours may be required at the option of the principal. Each pupil is required to perform at least 3 hours of fieldwork on every other Saturday forenoon.

II.

EDUCATION IN CERTAIN FOREIGN COUNTRIES.

ENGLAND.

GENERAL.

In its report for 1916–17 the board of education states that "the year has been noteworthy for its demonstration of the advantages which can be derived from enlisting the cooperation of the educational institutions of the country in the promotion of various national movements." The difficulties due to the military occupation of schools and the inadequate supply of teachers have not decreased appreciably, but while the ordinary studies of the schools have continued unabated additional work in the national cause has increased. The schools have served as valuable centers for disseminating information on food conservation and war recipes, promoting thrift, and the sale of war loans. Out of 35,000 war-savings associations in existence at the end of June, 1917, about one-third were connected with the schools. Handwork has profited by the new motive, and work has been done for the soldiers and in making equipment for hospitals and even munitions plants. Not only have the schools proved to be effective agencies in inculcating the new economy in food, but they have participated largely in increasing the supply by the development of school gardens.

The teachers have played no small part in developing these patriotic endeavors and have won for themselves a new place in public esteem. Says the report for 1914–15:

> When peace is restored the teachers of England need have no fear if anyone asks them what they did in the war. They offered themselves freely, and, whether they stayed in the schools or carried arms, they did their duty, and the service is richer for their own practice and the exemplification of these principles of civic duty and patriotism which in times of peace they taught, and not in vain, by precept and exhortation.

This tribute is all the greater when it is remembered that the teachers have been among the last to receive additional remuneration to meet the increased cost of living. Local action was dilatory at first, and it was not until the close of 1915 that war bonuses became general throughout the country, followed by the establishment of

new scales of salaries. It was Mr. Fisher's intention that a large share of the supplementary grant in 1917 of more than $19,000,000 should be devoted to teachers' salaries. The reports of two departmental committees appointed to inquire into the principles which should determine the construction of scales of salaries for teachers in elementary and secondary and other schools were published in 1918 and open up brighter prospects for all teachers, while the Government is planning to introduce pension systems for teachers of all grades.

The evil effects of the war which were early manifested in the poor attendance and the premature withdrawal of young children for employment have been checked largely by publicity and the cooperation of Government departments and by the increase of remedial and preventive measures. In 1917 the board of education offered to pay a grant equal to half the cost of maintaining evening recreation centers, while the Home Office appointed a juvenile organizations committee to consider facilities for the recreation and guidance of adolescent boys and girls. The departmental committee on juvenile education in relation to employment after the war urged the importance of continuation schools and the vocational guidance of boys and girls on leaving school, with the result that education authorities have taken steps to render juvenile employment bureaus, established under the Education (Choice of Employment) Act, 1910, more effective.

Retrenchment in educational expenditures has continued but has been directed to the elimination of overlapping between the central and local authorities; the reduction of clerical and statistical work; the closing of evening schools, no longer in demand owing to the absence of a clientele; and in other ways that have not seriously affected the efficiency of education. The building of new schools has, of course, been suspended. The cost of education has, however, inevitably increased, and, while figures are only available in the national estimates, a somewhat similar increase may be assumed for local expenditure. For 1913–14 the estimates for the board of education were $74,621,595, and for 1917–18 they had risen to $102,375,180; but for 1918–19 they are $98,804,980, a decrease due mainly to a reduction in the grant to the department of scientific and industrial research. Since the outbreak of the war the board of education has assumed a number of new financial burdens whose full effects are not yet manifested. These include half the cost of maintaining adequate schemes for medical treatment; half the cost of maintaining evening recreation centers, schools for mothers and nursery schools; half the cost of salaries for trained organizers and supervisors of physical training and games; increased grants to secondary schools, both for general purposes and for advanced courses; and the increased cost of

pensions to teachers already retired. The directions of future increase in the national expenditure are indicated by the promise of the new act by the provisions of which half the cost incurred by local authorities for maintaining comprehensive schemes of education will be met by the board. The vast and unproductive expenditure demanded for the conduct of the war has awakened the country to a realization of its tremendous financial strength, which will be devoted after the war to the task of reconstruction. But the increased participation of the central authority in the expenditures of the country for education will not be permitted to lead to the development of a centralized and dictatorial bureaucracy. Nothing that has occurred during the war has shaken the traditional English faith in the principle of freedom and initiative in local government, but the war has had the effect of arousing that sense of responsibility and that social conscience that are the corollary of freedom.

SECONDARY EDUCATION.

The four years since the beginning of the war have witnessed an increased enrollment of boys and girls in the secondary schools, accompanied by a widespread consideration of the aims and purposes of secondary education. The increase in numbers has been due largely to the prosperity consequent on the development of war industries, partly to the greater interest in education. So great has been the demand for the admission to secondary schools that many schools have been compelled to institute a waiting list, while in the absence of adequate accommodation and the reduction in the number of teachers the board of education has been compelled to relax the regulations as to the size of classes in schools on its grant list. A few schools are still under military occupation. The following figures indicate the increase during the past four years in England and Wales:

Enrollment in the secondary schools.

Year.	Schools on the grant list.	Boys.	Girls.	Total.
1913–14	1,027	99,225	88,079	187,304
1916–17	1,049	113,214	105,644	218,858

Although the figures are not available, since the collection of statistics has been suspended, the increase has probably been similar in schools not on the grant list and in private schools in general.

Soon after the outbreak of the war criticisms were heard of the secondary schools. They had succeeded in the task of developing leaders and training individual initiative and independence, but they

had failed to inspire their pupils with love of intellectual pursuits and to give them the knowledge needed in modern life. Soon the discussions narrowed themselves down to a dispute on the relative merits of a classical and a scientific education in which the advocates of modern language studies soon engaged. There was unanimous agreement on one point, that it is not the function of the secondary schools to provide vocational or professional preparation, and under no circumstances should specialization begin before a good general education had been completed at about the age of 16. It was generally agreed that secondary education, beginning at about the age of 12, should provide an education for four years including English language and literature, one or two foreign languages, geography and history, science and mathematics, drawing, organized games, physical training, manual instruction, and singing, with necessary differentiation for girls to include domestic subjects. These subjects are required by the regulations of the board of education for secondary schools on its grant list, but it was charged that even here there was a tendency to encourage the study of classics at the expense of other subjects. After much informal discussion the question was finally settled at conferences between the Council on Humanitarian Studies, representing the interests of the linguistic and literary subjects, and a committee of the Royal Society representing the interests of the sciences. The agreement emphasizes the importance of general education along the lines mentioned above up to 16 and specialization after that stage has been completed. The reports of two committees appointed by the prime minister, the one to consider the position of natural science in educational institutions in Great Britain, and the other to consider the position of modern languages will have great weight in developing public opinion in favor of these two branches of study.

Recent regulations of the board have given concrete effect to these tendencies. In the regulations for 1917 the establishment of advanced courses for pupils who have completed a general course is encouraged. These courses, covering two years' work, are contemplated in science and mathematics, classics, and modern studies. but while specialization may follow any one of these lines, attention must be given in all to English language and literature, to languages in the scientific course, and to science and mathematics in the other courses. To encourage the development of such courses special grants of $2,000 for each course will be paid, in addition to the regular grants which were raised at the same time. It is not expected that every school will develop courses in all the three branches, but opportunities are to be offered in every educational area for the pursuit of all the courses. The result will be a pooling of resources and the transfer of pupils to schools best equipped to give the course desired.

In May, 1917, arrangements were finally concluded for the establishment under the board of education of a secondary school examinations council, whose chief task will be to eliminate the excessive number of school examinations and limit them to a few that are to be administered by the universities severally or jointly. In approving the standards of the examinations of the council it is expected that the syllabus of a school and the suggestions of teachers will be taken into consideration and that the school records of pupils will be taken into account. Only two examinations will be approved—the first at the close of the general course at about 16, the second on the completion of the advanced courses. It is proposed that pupils passing the first examination with a good grade shall be admitted to the universities without further examination and those passing the second examination shall enter the universities with advanced standing. The board will pay the necessary fees for examinations. The aim of the new regulations is to relieve the schools from the pressure of external examinations and to encourage the free development within standards generally accepted for the whole country. The secondary-school examinations council's actions are subject to the approval of the board of education, which acts as an advisory council.

THE EDUCATION ACT.

The past year has seen the culmination of the efforts to secure educational reform in England. The enactment of the Fisher bill in August, 1918, is but one phase of a broader movement for social and economic reconstruction after the war. Many of the changes that have been going on and will no doubt continue to go on in English education are not included in this act. The most significant change, perhaps, has been the new public attitude to education in general. That solidarity that was created by the great crisis has been turned to good effect, and a new stimulus has been given to the movement for educational reform that had already commenced before the war. The dislocation caused by the unexpected outbreak of the war in 1914 seriously affected education, and all thoughts of a reorganization fell into the background. As soon as the necessary adjustment to new conditions had been made, as described in the last Report of the Commissioner of Education, page 75 ff, the necessity of devising plans for reconstruction after the war came to the front. In this movement there were associated not only professional educational associations, but the representatives of labor and employers. In view of the importance of the situation the Times Educational Supplement began in 1916 to be issued weekly instead of monthly as hitherto, and the general press devoted more space to education than ever before in the history of education in England.

Plans and policies were published by educational organizations representing school principals, teachers, administrative officials, and educational committees, and bodies devoted to the interests of different branches of the school work. The workers' educational association conducted conferences and issued a program; the British Labor Party, the Trades Union Congress, and local branches of the trades unions considered the principles that should underlie the future reorganization of education. Finally, the Government addressed itself seriously to the subject as part of the general platform for reconstruction, recognizing that the solid foundation of a settlement of the many problems that confronted the country can only be established in a sound system of education. In 1915 there was inaugurated a committee of the privy council for scientific and industrial research, assisted by an advisory council of specialists; this committee was given the status of a department in 1916. When the ministry of reconstruction was established in 1917 to take the place of an earlier committee on the subject, one of the 15 general branches submitted to its consideration was devoted to education, and of the 87 committees established under the ministry, 8 were assigned to educational topics. These included the reorganization of the University of Wales, salaries for elementary and secondary-school teachers, the position of science and of modern languages in the educational institutions, juvenile employment, juvenile organizations, such as clubs and brigades, and adult education. But most of the other subjects under consideration have their educational implications. The Whitley committee on joint standing industrial councils, for example, considered the promotion of an intelligent attitude to science on the part of employers and the working classes. The Representation of the People Act, passed in 1918, extending the franchise to a larger body of men than hitherto and to about 6,000,000 women, also implies a wider diffusion of education. For a time it was thought that the general subject of educational reorganization would also be intrusted to the ministry of reconstruction, but it became clear that the matter was one of urgency and could not wait upon the delay that such a procedure would have involved.

At the close of 1916 Mr. H. A. L. Fisher, vice chancellor of the University of Sheffield, was appointed president of the board of education, and it was understood that his chief task would be the introduction of an education bill to meet the demands contained in the numerous recommendations and suggestions that had been made during the preceding year. The appointment of Mr. Fisher was greeted with universal approval, and as the first appointment to the position of a man whose claims rested on his knowledge of the subject with which he was to deal rather than on his political serv-

ices, past and prospective, it marks in itself the beginning of a new era in English education. In February, 1917, Mr. Fisher, in an address to the teachers of the country, emphasized the point that "the proclamation of peace and victory in the field will summon us not to complacent repose, but to greater efforts for a more enduring victory. The future welfare of the nation depends upon the schools." Three months later, in April, 1917, when Mr. Fisher introduced the educational estimates demanding an increase of more than $19,000,000 over the estimates of the previous year, Parliament gave an earnest of its new attitude to education by its ready assent. The greater part of this increase was to be devoted to the better payment of teachers, "the first condition of educational advance." The way was now prepared for the introduction of the education bill in August, 1917. This bill, while meeting with universal approval for its purely educational proposals, met with strong opposition from education authorities because of the fear that certain clauses would endanger local independence and establish the bureaucratic control of the board of education. Some opposition was also encountered from employers of labor, who were not yet reconciled to the clause requiring the compulsory part-time attendance at continuation schools of boys and girls between the ages of 14 and 18. The remainder of the year was spent by Mr. Fisher in meeting deputations and considering objections to the administrative provisions of the bill, and in a tour of propaganda in the north of England, where it seemed likely that opposition to the compulsory continuation school measure would prove most serious. In February, 1918, a new bill was substituted for the earlier measure, and it was generally felt that it had now become an "agreed bill." The administrative provisions had been modified, and all suspicion of bureaucratic tendencies had been eliminated. Such opposition as the bill encountered in the course of the debates in Parliament during the summer of 1918 came from those who demanded more than the bill granted, especially the establishment of free secondary education and provisions against the introduction of military training and early vocational specialization in the schools and from a group representing the interests of some employers who continued their opposition to the compulsory feature of the continuation school measure. No difficulty was met in pacifying the first group of opponents; the opposition of the latter was removed by a compromise to which reference will be made below. The act received the royal assent on August 8, 1918, and on that date the greater part of the provisions became operative, the "appointed day" for the remainder being postponed for the present.

The act continues the existing structure of the educational administration established by the Education Act of 1902. The councils of county boroughs and counties are responsible for elementary and

higher education; the councils of noncounty boroughs and urban districts for elementary education only. The position of the board of education remains unchanged, with the exception that it now has the function of approving or rejecting, subject to conference with the local authority concerned and the ultimate decision of Parliament, schemes that must be submitted to it "for the progressive development and comprehensive organization of education." In place of the different grants for various objects, a consolidated grant equal to not less than one-half of the local expenditure will be paid from the national funds. The board thus has the power of setting up standards of efficiency as the basis upon which schemes will be approved. The private schools are for the first time brought within the scope of public supervision and will be required to furnish such information as the board may desire; at the same time they may be inspected either by the board or by a local education authority in order to meet the certain standards of efficiency. These measures will thus provide room under the national system for the development of both public and private schools.

The powers of the local authorities are also extended. The limit imposed on the amount that could be raised by local taxation by county councils for higher education has been removed. The administration of the Employment of Children Act, 1903, the Prevention of Cruelty to Children Act, 1904, and the Children Act, 1908, is now intrusted to the education authorities. Further, the organization and provision of extra-curricular activities, such as holiday camps, recreation centers, facilities for physical training and games, school baths and swimming baths, are placed in the hands of the same bodies. The responsibility for the development of local initiative and progress is placed on local education authorities; and, since the grants from the Government will in future be dependent on the acceptability of a scheme of education that is comprehensive for an area as a whole, the board, and in the last analysis Parliament, has an effective weapon for dealing with recalcitrant authorities.

The war has emphasized the importance of physical training and of medical inspection and treatment. The act provides for the establishment of nursery schools for children between the ages of 2 and 6, in which attention will be paid chiefly to "health, nourishment, and physical welfare." Medical inspection of school children will thus begin at these tender years, be carried through the elementary schools, and be extended by the act to both secondary and continuation schools. The organization of adequate measures of medical inspection and treatment will be taken into consideration as a necessary part of a comprehensive scheme of education. The board has already undertaken to pay half the cost of maintaining schools for mothers, in which instruction is given in prenatal care and the care

of infants and nursery schools. The provision for physical training and welfare is further extended by empowering authorities to maintain extra-curricular activities, and the board will make grants equal to half the cost of the salaries of play supervisors and of maintaining evening recreation centers. Child labor, which is one of the greatest menaces to physical well-being, is now placed by the act under the control of education authorities, and no child under 12 years of age will in future be permitted to be employed at all, and children between 12 and 14 may not be employed for more than two hours a day between 6 in the morning and 8 in the evening; street trading and employment in certain occupations are forbidden, while school medical officers may prohibit the employment of individual children in any occupation that may endanger their health.

The act abolishes all exemptions from attendance at school between the ages of 5 and 14, unless a child is attending a nonpublic school subject to public inspection. Pupils will in future be permitted to enter and leave school only at certain times in the year. Where nursery schools are established, a child may attend up to the age of 6 before entering an elementary school. At the other end local authorities may enact by-laws requiring compulsory attendance at public elementary schools up to 15 or even 16. As a result of the extension of the attendance ages, the act permits the organization of advanced work for the older pupils, either in the elementary schools or in central schools and special classes.

Secondary education is only indirectly affected by the act, since the suitable provision of this branch will be required in the comprehensive schemes and will be stimulated by the removal of the tax limit for higher education. The question of the provision of free secondary education came up in the course of debates in the House of Commons, but was shelved; for the present the act requires that "children and young persons shall not be debarred from receiving the benefits of any form of education by which they are capable of profiting through inability to pay fees." Opportunities will be increased by the provision of more schools, more scholarships, a greater number of free places, and the granting of maintenance allowances.

It was Mr. Fisher's intention in the original bill to require the compulsory attendance at continuation schools of boys and girls between the ages of 14 and 18 for eight hours a week during 40 weeks in each year between the hours of 7 in the morning and 8 in the evening. This proposal met with considerable opposition from employers on the ground that such a measure would interfere with industry and the labor market. Mr. Fisher pointed out that "there is nothing sacrosanct itself about industry. The real interests of the State do not consist in the maintenance of this or that industry, but

in the maintenance of the welfare of all its citizens." In view, however, of the great difficulties involved in establishing a system of continuation schools for about two and a half million young persons at a time when there were not enough teachers to carry on the regular work of the schools and not enough accommodation in which to conduct it, Mr. Fisher agreed to postpone the full operation of the compulsory provision as it affects young persons over 16 for seven years from the date on which the act becomes operative and for the present to require only seven hours of attendance each week. The provisions for social and physical training and for medical inspection apply to the continuation schools. Their scope is defined as schools" in which suitable courses of study, instruction, and physical training are provided without payment of fees." It seems probable from the discussions on the subject that these schools will pay more attention to general and liberal education than to vocational, although the occupational interests of the students will furnish a necessary starting point.

The act does not provide for a complete reorganization of English education. It does not touch, for example, on university education, or the training of teachers, or on adult education, or technical and vocational education. All these subjects can be treated by means of administrative regulations of the board, which has already greatly affected the future development of medical treatment, physical training, and secondary education by the exercise of this power. The act in large measure accomplishes the chief object that was demanded; it is "the first real attempt ever made in this country (England) to lay broad and deep the foundations of a scheme of education which would be truly national."

FRANCE.

The war has affected the conduct of education in France perhaps more than in either England or Germany. For the first two years the demands at the front tended to subordinate all other thought and activities to the one great purpose. More recently the educational literature of France indicates that the war has had the effect of leading to considerable questioning of and dissatisfaction with the existing systems of education. Radical changes have not yet taken place in educational administration or organization, but the ground is being prepared by discussions and conferences, by public and private commissions of inquiry, by articles in the daily press for the reforms that it is now generally felt must come after the war. The schools will be called upon to play an important part in the restoration of the country and must be improved to meet the new demands.

It was perhaps to be expected that France would be influenced by the close contact with the British and American forces. A widespread movement has begun for the improvement and extension of physical education and games throughout the country, not merely to develop agility and endurance in the individual but to strengthen the nation as a whole. Early in 1917 a commission was appointed to study the reorganization of physical training in the schools. In April, 1918, the ministry of public instruction issued a circular to the rectors of the academies urging the development of physical education and games and athletic sports in secondary, normal, and higher elementary schools. It is pointed out that such training could be organized without encroaching on class work. School principals and teachers are asked to encourage the establishment of clubs under their general supervision and with the assistance of advisory committees representing the public and alumni associations. The French league of school hygiene is actively promoting the introduction of open-air exercise in which teachers should also participate and is advocating the introduction of school medical inspection and the keeping of records of physical development. A *Union des sociétés française de sports athlétiques* has been established to promote the development of school athletic clubs and to secure playing fields. It is suggested in the circular that participation should not be made compulsory and that no boy be allowed to take part without the written consent of his parents, so that the State might be relieved of responsibility for accidents. The union has made advantageous terms with insurance companies to furnish compensation in cases of accident.

The changes brought about by the war in the position of women has made the reorganization of secondary education of girls a question of vital importance. As in other countries, women have taken the places of men in every walk of life and have proved themselves equal to most tasks, but the change in the social tradition has been more revolutionary in France than elsewhere. It is recognized that not only the professions but positions of leadership in commerce and industry must in the future be opened to women on an equal footing with men. Women have been admitted for some time to the practice of law and medicine, and new careers are constantly being made accessible to them. New commercial schools for girls have been established in different parts of the country; the Central School of Arts and Manufacture now receive them, as well as the School for Watchmaking and the School of Physics and Chemistry. These developements have led to a demand for a reform of the system of secondary education which, as organized at present, is adapted chiefly for girls of the wealthy middle classes who do not intend to prepare for any special career. The proposals take the form of a

demand either for secondary education of the same type as that for boys or a new and extended organization of the existing system. The objection to the first suggestion is that the basis of the lycées and collèges for boys is not sufficiently broad and that the majority of girls at present do not desire a preparation that leads only to the universities and professions. The difficulty in the way of the second proposal is the national tradition of privileges, certificates, and examinations as marking the end of a school course. The problem involves, therefore, not so much the reorganization of girls' schools as the nature of the *sanctions* to which it will lead. At the close of 1916 the minister of public instruction appointed a commission to inquire into the modification in the organization of studies and privileges for the secondary education of girls. The commission issued questionnaires to education authorities and parents' associations and subcommittees of the commission drew up a number of recommendations which are being considered by all the members. The chief recommendations are as follows:

1. The education of girls needs a new organization and an appropriate program of studies.

2. The schools shall be organized in two cycles, the first of four years, the second of two. The course shall begin at the age of 12.

3. In the first cycle the school day shall be one of four hours; in the second cycle, of five hours.

4. Fourteen hours a week shall be given to compulsory subjects in the first cycle; 17 hours in the second.

5. An important and compulsory place shall be given to studies appropriate for girls (household arts and hygiene), practical work and physical training.

6. The six years' course shall be brought to a conclusion in an examination on the work of the last year, leading to a *diplôme de fin d'études*, equivalent to the first part of the baccalaureate.

7. As many careers as possible shall be open to girls holding this diploma.

One of the burning questions in the secondary education of girls is whether Latin shall be included in the reorganization. The commission will probably favor its inclusion for those who desire it. It is also proposed that a seventh year be provided in the organization for girls who wish to complete the baccalaureate to enter the universities or to prepare for a professional career.

The secondary education of boys is no less under fire. Several problems are here involved. There are many serious proposals to reorganize the whole system of French education with a common elementary school as the basis. It does not seem probable that such a reform will take place in the near future. A compromise is suggested that better means be provided for the transfer of pupils from the elementary to the secondary school at the age of 11 or 12, with improved articulation between the work of the two schools at this stage. It has already been found that elementary school pupils are not presenting themselves in large numbers for the scholarships to

the secondary schools, and prefer, if they intend to pursue their educational career, to pass on to the higher elementary schools. There are reactionaries who oppose even this concession on the ground that secondary education should be for the selection of the élite, for the training of specialists, and that, therefore, the way should not be made too easy. The functions of the elementary and secondary schools are, according to this group, not the same, and even the elementary section of the secondary school has a different purpose from the general elementary school. The establishment of a common elementary school would only conduce to the undesirable development of a large number of private schools.

More widespread has been the demand for more scientific and technical training in the secondary schools and elsewhere. This utilitarian movement is attracting considerable support and has its center in such a body as La Ligue française. The tendency seems to be in the direction of early specialization through technical education, trades preparatory schools, or apprenticeship adjusted to local needs. It is feared by those who are interested in general education that everything will be subordinated to industry and that Germany, though defeated, will win a great victory in thus securing an acceptance of the materialism that has characterized so much of her education. It is claimed by the advocates of the new movement that the war has been won by the technical sciences, and the years of destruction must be repaired by years of industrial application to make up the losses and compete with other nations. Fortunately, as their opponents argue, the war has also shown that with a general education even the technical foundations for the most complicated and exacting branch of the Army—the Artillery—can be acquired in a short time. Even if it is true that the basis of modern social organization is division of labor, it becomes more essential than ever to prolong that education that gives all citizens a common background of general education and culture that stresses human values. It is conceded that the secondary schools may have neglected the sciences, but that does not establish their claim to absorb the whole of the curriculum. Here, too, it is urged that a compromise is possible, and that no boy or girl should be allowed to complete an education without giving some time to both the sciences and the humanities. To concede the situation entirely to those who demand technical and vocational preparation would involve a betrayal of the ideals for which the world has been fighting to the dangers of barbarism and materialism.

The project for a continuation school law, to which reference was made in the last Report of the Commissioner of Education, has not yet been passed, but seems to be exercising some influence already. At Corbie the local manufacturers have posted notices to the effect

that they would employ young persons leaving the elementary schools with the certificate of studies, and allow them to attend the local higher primary school for three years, providing tuition, books, apparatus, and even maintenance grants. On leaving these schools the pupils would enter the factories as apprentices for two or three years, during which they would continue to attend school three times a week for general and technical instruction during working hours and without loss of pay. The abler among them would be sent on to schools of arts and crafts, receiving maintenance allowances and tuition during their period of study. The parents would be under no obligation to the employers except to permit them to control the educational progress of the young employees, so that they may become active, enterprising, and proud of their country.

MOVEMENTS AND TENDENCIES IN ITALIAN EDUCATION.

The study of Italian education since the entrance of that country into the war in May, 1915, must follow closely the lines necessitated by the urgent problems forced from the first upon all belligerent countries. These lines were predominantly practical and humanitarian. For Italy they took shape at once in the relief and maintenance of the refugees from Venetia, the Province overrun by the Austrians, and, secondarily, throughout the length of the Kingdom, in the assistance rendered needy families of men called to arms. These problems, while for economic and social reasons more immediately pressing upon the destitute urban population, speedily came to bear upon the rural as well, and local relief societies rapidly sprang up in the first few months of the war. Such organizations as the Patronato Scholastico, already existent in every parish, and even before the war of great philanthropic usefulness; the Mutualitá Scholastica Italiana, a financial society for the mutual relief of depositors; the local branches of distinctively educational organizations; and the widely spread Associazione Nazionale dei Parenti, all threw themselves into some practical task of alleviation of need. All such cooperative movements soon came to be essentially educational. The schoolhouses became the centers where individual tasks were assigned, meetings of every description were held, and most of the articles needed were made. Very fittingly, the teachers became the active community leaders. On the strictly educational side, the ministry decreed special provisions for the teachers and children who had refugeed from the portions of Italy overrun by invasion, securing employment for teachers and admitting all pupils to schools of equal grade, and, if they were of Italian nationality coming from Austrian and Hungarian schools, accepting German as a substitute for French as a foreign language.

ELEMENTARY EDUCATION.

In elementary education, while no strictly legal reforms of method or content for studies were made, there were marked changes in the spirit and purposes in which it was imparted. The systematic attempt was made to bring elementary education into vital union with the needs of everyday life, especially in the rural districts. Larger latitude was granted by the ministry of public instruction to the inspectors of the Provinces and even of localities to incorporate in the old courses other useful ones, especially in horticulture, agriculture, and agricultural economics, in accordance with climatic, topographical, and other local conditions. At the same time new regulations provided for more rigorous and frequent inspection of elementary schools of all grades, and better organic linking up of even the most remote schools with the revivified national system.

All these concentrated efforts of the Government and the school authorities to keep before the Italian people the vital importance of the school in the national life have been rewarded with extraordinary success. Despite the convulsions of the war, the enrollment in elementary education, according to figures of January 1, 1916, surpassed by more than 500,000 that for 1914 and on an estimated gain of barely 1,000,000 in population. In the far-reaching benefits accruing from this awakened interest in elementary education, the infant schools, kindergartens, and auxiliary schools, both public and private, and parents' associations have shared, and their scope has been widened by private initiative and governmental encouragement.

In this connection it is intersting to note that the Montessori system of training for very young children, which aroused great hopes when it first became known in the United States about eight years ago, is now considered by expert Italian critics to be distinctly disappointing as a contribution to practical pedagogy. The schools have remained static in numbers, and are practically confined to the city of Rome. It is felt that the needs of children having muscular or nervous defects, for whom the Montessori system came into being, have largely been met by the widened scope of the elementary schools, with the scientific and pedagogical changes they have undergone during the past two years. The Montessori schools may, however, still maintain themselves, ministering to urban children.

SCUOLE POPOLARE.

The establishment of the so-called *scuole popolare* has been the furthest-reaching step taken in Italian education in many years, even if it is not, as their ardent champions affirm, the most epochal ever taken. The very history of the move by which the scuole popolare were initiated was unique in the annals of educational legislation. The bill

finally passed by the Italian Parliament was a combination of the plan submitted by Signore De Nava, Minister of Industry, Commerce, and Labor (December, 1916), and that submitted by Signore Ruffini, Minister of Public Instruction (February, 1917).

These scuole popolare are essentially rural, of a predominantly scientific nature, allowing great freedom in courses and hours, adapted to intensive training in the needs and possibilities arising from local climate and environment. On the financial and administrative sides they are autonomous and supported by the commune in cooperation with the State, with the encouragement of local and private benefactions. Children who have had three years in elementary schools are admitted to them, and they are planned to appeal primarily to the children of those classes to whom, through economic stress, further continuation in school has hitherto been denied.

Unusual care will be exercised in the selection of teachers for these schools, only those being chosen who have shown real aptitude in teaching the subjects there stressed. Special duties of oversight and conference will be assigned patrons and local auxiliary bodies, whose interest will be enlisted in all possible ways. It is confidently expected this will, in turn, work toward the diminution of adult illiteracy. These schools have, by the law, just been put in operation (September, 1918), and the practical results from them will be watched by students in all countries with the keenest interest.

FIGHT AGAINST ILLITERACY.

The war has caused no slackening in Italy's serious grapple with the chief menace to her national life, adult illiteracy. Though every census since 1871 has shown a gratifying steady decrease in this respect, from 68.8 per cent of total population to 41.8 in June 1911 (the most recent figures available), yet school authorities and the press are not content. Night and holiday schools for adults, already in operation, have had their defects exposed and have been substantially reinforced in various ways. The military authorities, in conjunction with the ministry of public instruction, have instituted compulsory schools in posts and cantonments for illiterates under arms, both veterans and recruits.

SCHOOLS FOR WOUNDED SOLDIERS.

In this connection perhaps the most inspiring of all educational activities is the work of the schools for wounded soldiers, annexed to the hospitals in the larger cities of northern Italy. These schools are not primarily for physical rehabilitation, nor for training in trades and crafts, though these subsidiary lines are kept in view. They are expressly for teaching book subjects. The results obtained and recorded in a representative one, that maintained at the *Ospe-*

dale della Guastalla, near Milan, are so encouraging as to be almost revolutionary in the field of teaching illiterates. For students of practical pedagogy the comparison afforded between the progress made by such adults and that by the normal child in the specific subjects of instruction is most valuable and illuminating.

MIDDLE SCHOOLS.

The growing dissatisfaction with old forms of education has not spared even the middle schools of Italy, though these, by their very nature, appealed only to the select few. Beginning with the school year of 1917–18, new courses of study and schedules, formulated by the ministerial council, went into effect. While the classical Ginnasio-Liceo of the traditional type, with its eight years of prevailingly cultural studies, had the hours in Greek and Latin slightly increased, mathematics and history were reinforced, and the study of physics and chemistry and physical education was made compulsory.

The Ginnasio-Liceo Moderno, the counterpart of our scientific type of high school and elementary technical school, increased the hours of Latin teaching to 41 per week, the largest number assigned any subject, laid additional emphasis upon the modern languages, gave English and German as alternates, and reinforced the hours in mathematics, the combined study of history and geography, natural science, and physical education. More time and greater latitude in the combinations of examinations were allowed. In view of the imperative demand in other fields that the number of hours of weekly recitation be diminished, the conservative basis of the Ginnasii-Licei of both branches is shown by the fact that it was left untouched in them, ranging from 22 hours for the first year to 27 or 28 hours for the last.

NORMAL SCHOOLS AND TEACHERS' INSTITUTES.

The reform of the normal school in Italy, discussed more or less lukewarmly for several years before the war, rapidly gathered momentum as it came to be seen, with increasing clearness, both by the people and by professional educators, that all other educational reform waited upon reforms in this central domain. Here Minister Berenini, perhaps the most aggressive of the many devoted men that have held that portfolio, had more intense hostility to combat and more diverse sentiment to harmonize than in any other field. Combining the best in the sentiment of professional bodies most interested and that of local groups of teachers of 17 cities, whose study of it had been requested, his bill called for the merging of the old normal schools into teachers' institutes, under the following terms and conditions:

1. That the teachers' institutes consist of a general course of five years with related graduation certificate, and of an additional pedagogical course of two years.

2. That the list of courses and arrangements of classes be determined with regard to a fair balance of the realistic and humanistic studies, assuring a fair importance to the latter, continuing the study of Italian in the sixth year, and embracing the elementary study of psychology and logic without establishing a special chair for them.

3. That the outline of the pedagogical courses have greater professional consistency, making the teachers' apprenticeship one or two years, with unity of direction under the professor of pedagogy, assisted by the professors of drawing, manual arts, and sciences. It includes school legislation, to be taught by the professor of pedagogy.

4. That enrollment of new students in the second pedagogic year be forbidden, requiring for the first year the leaving diploma of the five-year course and the usual entrance examination.

5. That the teachers' institute be regularly for men and for women, and only in special cases mixed.

6. That, on completion of the course, women pupils who have obtained the diploma of fitness for elementary teaching may also obtain further specialized equipment by passing special tests of fitness according to regulations to be established by law.

7. That greater attention be paid to the study of hygiene, to singing, and physical education, and, according to locality, to increase of agricultural teaching, for which experimental farms shall be provided.

8. That, in consequence of the new requirements for the teachers' institutes, special attention be directed toward the careful reform of all the schools that prepare teachers therefor.

Points of detail which are regarded as making great advance over provisions of the old laws are: The three-group arrangement of (1) letters, history, and geography, (2) mathematics and sciences, and (3) drawing and manual arts; the diminution of hours; the progressive development of subjects by difficulty and correlation; simple programs; more compact and convenient arrangement of examinations; the increase in the material equipment of museums, libraries, and laboratories; the organic integration of teacher training with the scientific courses rather than, as almost exclusively hitherto, with the historico-literary ones. The subjects taught in the first six years of the new teachers' institutes are as follows: The Italian language and literature; history and geography; general pedagogy and ethics; French; mathematics and the physical sciences; manual arts, drawing, and penmanship; singing; and physical training. In the seventh year, distinctively for professional training, are taught: Pedagogy, its methodology and history, hygiene,

agriculture, singing, physical training, and education, with practice teaching in the annexed elementary school, and, for women, in the kindergarten.

EDUCATION OF WOMEN.

The reforms in both the middle schools and the normal schools carried distinct recognition of the claims of education for women. In 1916 a new normal school for women was established at Naples, conforming rather closely to the lines actually embodied nearly two years later in the new teachers' institutes. In the same year the ancient University of Bologna, for the first time in the history of Italian education, conferred the full teacher's diploma upon a woman. A congress of women held in Rome in October, 1917, was largely attended, and, among the many creative measures considered for closer articulation of women's activities with the war needs of the nation, vigorous expression was given the demand for more useful and universal education of girls. Much was anticipated by various speakers from the provisions in the system of the scuole popolare, which concerned the training of country women.

UNIVERSITIES AND HIGHER EDUCATION.

No other single intellectual influence has been so potent as that of the universities of Italy in disseminating throughout the nation a just appreciation of the historical and ethical reasons for Italy's share in the war, in arousing and maintaining sentiments of patriotism and consecration to duty.

By permission of the ministry individual universities granted, as valid for the period of the war, to candidates for degrees under arms and engaged in recognized war work, the degree applied for upon presentation and satisfactory defense of the required dissertation, and upon the satisfactory passing of the prescribed examination. A beautiful sentiment also was the permission to confer the *Laurea di Guerra* (war diploma) upon students of the last year's course fallen in the service.

By later decree the council of ministers allowed all students, of whatever grade at the outbreak of the war, in the faculties of jurisprudence, medicine, surgery, mathematics, physical and natural sciences, letters and philosophy, and pharmacy, if called to arms, to be enrolled for 1915–16 in the courses named.

KINDRED INTELLECTUAL LINES.

Outside of Italy's successful struggle to keep unimpaired her pedagogical system, it has been most encouraging to note the many signs of her uninterrupted intellectual life. There has been no ces-

sation of the meetings in the large centers of her literary, scientific, and pedagogical societies. Within the past two years the following societies, representing the organized intellectual leadership of the nation, have held their regular meetings and maintained unbroken their mutual helpfulness: The National Association of University Professors, the National Association of Heads of Institutes, the Federation of Instructors in Middle Schools, the National Association of Docehti, the National Teachers Union, the National Association Nicolo Tommaseo, the National Association of School Inspectors and Vice Inspectors, the Italian Federation of Ginnasei-Lycei, the Italian Society for the Advancement of Science, the Royal Academy della Crusca, the Italian Union for Popular Education, the Italian Federation of Popular Librarians, the National Institute Minerva. They have been attended by people of all professions and walks of life, by civil and military authorities, magistrates, men of letters, academicians, in all a signal proof of the Italian national spirit. Prizes have been conferred for essays on literary and scientific themes. The work of the national committee appointed before the war upon the History of the Risorgimento (Struggle for Italian Independence, 1830–1870), has gone steadily forward to the culmination of its labors in a permanent memorial in the halls of the monument to Victor Emanuel. In short, the patriatic, intellectual, and educational forces of Italy show but little disturbance of their serene confidence in the ultimate triumph of forces and movements by which alone men and nations live.

GENERAL CHARACTERISTICS OF EDUCATION IN THE SCANDINAVIAN COUNTRIES.

These three countries are grouped about the Baltic and the arms of the North Sea in northern Europe. They comprise approximately an area of something over 200,000 square miles, with a population of nearly 10,000,000. The people belong to the same race; their languages, though presenting considerable differences, have a common origin in the same Norse parent tongue. In religion and government, as well as in the tendencies and organization of their schools, they have many characteristics in common.

The schools of Norway, Sweden, and Denmark have an unbroken development from the time of the Reformation to the present day. Some traditional tendencies have been strong from the earliest times. The secondary schools for boys, early established, were intended to prepare young men for the ministry and the other learned professions; they were also intended to train them for official positions and to give the wealthy classes an education befitting their rank in society.

More recent demands for equal education of both sexes have resulted in establishing a number of secondary schools for girls in the

three countries. These were begun as private institutions, but were later taken over, placed under State supervision, and given financial aid by the State.

Sweden has two universities; Norway and Denmark one each; and all three countries have professional and technical schools of high renown.

The administration of all classes of schools, from the primary to the university, is in the hands of the church and the State with administrative power vested in a central board of control, presided over by the minister of education and ecclesiastical affairs. This board directs the changes in school regulations and prepares bills on school matters to come before the legislative bodies.

The work and the problems of all the Scandinavian schools are, in many respects, alike; in other respects the development in one country shows a marked departure from the common trend, resulting in characteristics and problems greatly unlike those of the other two.

In religion the instruction has been largely identical; the attempt to break away from the traditional form has brought on the most acute conflict in Sweden.

In Norway the schools have been active in advancing the trades, mechanical technique, the productive arts, and commerce. But here a special problem arises from the two languages sanctioned in the school work—the book language and the provincial vernacular.

In Denmark the schools have rendered great service to agriculture and commerce; they have taken in hand pupils physically and psychically defective. In Copenhagen the School for Cripples has shown what can be done for this class of unfortunates. The people's high schools of this country, besides training their pupils in the productive arts, have been no less efficient in imbuing them with high moral ideals and love of country.

Sweden has, ever since the time of Ling, made physical training and gymnastics an essential part of education, and she has also made sloyd, manual training, and all kinds of handicraft a conspicuous part of her school system. So far as the organization of her elementary and secondary schools are concerned, she has developed a system so articulated that it is well adapted both to the pupil who must conclude his schooling with a certain course and to the one for whom the same course is a preparation for further studies.

With the purpose of bringing together the teachers of the northern countries in their common work, the Teachers' Association of the North was organized. Its thirtieth anniversary, held in Stockholm in 1910, gave a program calculated to strengthen the bond of union that they felt already existed. On account of the war the annual meeting was suspended in 1916, with the understanding that no further session was likely to be held until after the war.

In 1917 the quadricentennial of the Reformation was observed throughout the northern counties by the schools, as well as by the churches. On the programs the work of Luther was reviewed in the light of his influence on education. It was claimed that—

> The public school is the child of the Reformation; the spiritual freedom which the Reformation served is regrettably abused at the present time; the religion it fostered is about to be supplanted by nonconfessional instruction or nonreligious morality; the schools will do well to take their bearings again and take note of what the Reformation did for them.

These countries, too, have been touched by the war in virtually the same way. In reviewing such reports as have appeared in the educational journals, the following are some of the phases brought before the schools by the war:

1. Some redistribution of the vacation period in conformity with demands for the teachers' and pupils' labor on the farms.
2. Appeals for the training of teachers to take charge of school work of a productive kind.
3. New direction imparted to the discussions of school curricula.
4. The rearrangement of the time scheme to find room for subjects having productiveness as their chief aim.
5. Attempts to give the established subjects greater practical application.
6. School organization of work groups to be sent to farms where help is needed.
7. Providing meals for needy pupils of the cities.
8. Establishing of school kitchens.
9. More extensive use of possibilities in school gardens.
10. Shortage of teachers—more general use of student teachers.
11. Hardships of teachers on account of insufficient salaries to meet increased expense—resulting in campaign for advance in salaries.
12. Efforts on the part of some thinkers and educators to counteract the disastrous effects which familiarity with war and its cruelties tend to leave on the child's mind. Prof. P. Nortorp, G. Wynecken, and others have addressed an appeal to parents and guardians to cooperate in counteracting these influences.

In the opinion of Prof. A. J. Helseth the chief causes that have advanced and improved the elementary schools of the three countries are:

1. The work of the school men to relieve the common schools by transferring less gifted or handicapped pupils to special schools.
2. Improved articulation between the elementary instruction and the continuation schools, so that pupils pursuing further studies are not hampered by insufficient preparation.

TEACHERS' SALARIES AND PENSIONS.

In the Scandinavian countries the salaries of teachers and the eventual pensions are regulated by law, so that a position means a certain salary after a fixed number of years of service, an increment, and on attaining the age limit a retiring allowance. No doubt a scheme of remuneration like this induces a teacher to look upon his calling not as a stepping stone to something more desirable, but as a life work. He is also relieved, in a measure, from petty annoyances of having to negotiate with local boards from time to time. The basis on which a teacher's salary is calculated is the needs and comforts which a person in the position of a teacher may reasonably expect.

In a general way, the remuneration is rather higher in Sweden than in the other two countries. In all three there is over and above the yearly pay free home, garden plat, and fuel, or the money equivalent of these.

The pending salary alterations in Denmark include details not so fully specified in the corresponding laws of the other countries. In the country elementary school a specified salary of 1,200 crowns is to be paid; in the city 1,400 crowns. Additions for length of service are to be made after 2, 5, 8, 12, and 16 years, each increment amounting to 250 crowns. A married teacher receives 200 crowns in addition, counted from the date of his marriage. For each child under 18 he receives 200 crowns. The salaries are to be computed on the basis of a year of normal prices with a consequent increase in the ratio of advance in expenses. The proposition specifies the rooms, kitchen, and other apartments, also the area of the adjoining garden plat. Any deficiency is made good in money according to a definite schedule of rates.

Since the outbreak of the war prices have gone up enormously, and while the Governments have provided some relief by special war bonus and high-expense bonus, the incomes of teachers have not kept pace with the outlay. The remuneration has been so nicely calculated that teachers have not had much laid up to meet emergency conditions. It must be said, however, that the Governments of all the countries are preparing measures of permanent relief as fast as parliamentary procedure will permit.

SCHOOL GARDENS IN NORWAY.

When gardens for productive purposes first came into existence in connection with schools they were left to be cultivated by children whose parents were poor. Since the outbreak of the war they have

attained a much greater significance. Experts are instructing the teachers, who, in turn, direct the pupils how to make the most of the square feet of ground allotted to them. Among the children's gardens is the teacher's own, supposed to be a model for the others and expected to show how much a little patch of ground can produce.

They have a procedure, called "intercultivation," by means of which several crops are raised simultaneously on the same lot. Between the potato rows they plant a species of beans which thrives without interfering with the potatoes. Among the strawberries they plant certain kinds of kale. Under the fruit trees and in other shaded places certain other kinds of the cabbage variety will grow. To get an early crop of potatoes the seed potatoes are planted in boxes, where they may form long shoots by the time the season permits transplanting in the open.

Seeds and plants are furnished the children free of charge; for their labor and care they get the crops they raise. It has been found that the interest displayed by the children reacts upon the parents so that they come to see the significance of the school gardens. The procedures here described are well known and to some extent practiced in all the Scandinavian countries.

EDUCATION IN RUSSIA.

The revolution of March, 1917, uprooted the entire educational system in Russia. The Provisional Government, headed by Kerenski, realized the full importance of the new situation and quickly revolutionized the schools, from the universities downward. The dictatorship from above, so characteristic of prerevolutionary Russia, gave way to a new order of things, "the democratization of education." This was accomplished in various ways. All grades of schools, and particularly the higher educational institutions, were thrown open to those willing to take advantage of them. All discriminations between pupils on religious grounds were abolished. Freedom of private instruction was assured, and church schools, the stronghold of reaction, were taken over by the ministry and secularized.

ADMINISTRATION OF SCHOOLS.

Instead of the complicated machinery headed by the curators and their assistants, the directors and inspectors of schools, a simple administrative system was introduced. The schools were placed under the control of the local self-governing bodies, the zemstvos (rural councils) or the municipalities, as the case may be. The pedagogical council became the controlling body for schools above the primary grades. The council comprised members of the teaching personnel,

representatives of the local self-government, and of the parents' organization, which play an important rôle in the school life of Russia. The council has the right to elect the teaching staff from the list of candidates submitted to it by the director of the school. The election of the head of an institution is reserved, however, to the local boards.

THE EDUCATIONAL LADDER.

A marked departure from the ordinary type of school was the splitting of the former gymnasium, an institution with a cultural bias, into a higher elementary (classes 1–4) and a secondary school proper (classes 5–8, inclusive). The former was intended to finish the cycle of elementary education, and the latter to serve as a stepping stone for those who intend to enter the university. Vocational schools were graded accordingly and are to run in a parallel line. This elasticity of division was expected to be of great benefit to students, who were enabled thereby to change courses at will from the cultural to a vocational, or vice versa.

THE REFORM IN SPELLING.

The school authorities eliminated from the Russian alphabet four letters. Three of them were identical in pronunciation with three other letters, and the fourth was not sounded at all. All of them were sources of great difficulty in the schools. The most troublesome of the four was used so irregularly that children could learn its use only by memorizing long columns of words which contained the treacherous letter. The time which was formerly so spent may now be used for more substantial studies.

NEW TEXTBOOKS AND OTHER PUBLICATIONS.

Revision of books that inculcated in the minds of the young generation the supremacy of the Czar of all the Russias was undertaken by a special committee appointed by the minister of education. The Soviet authorities, succeeding the Provisional Government, went a step farther. A. Lunacharski, the commissary of public instruction,[1] formulated a bill which enables the Government to confiscate all literary productions for the period of five years and issue them in popular editions for the benefit of the people. This can be done, however, only after the fifteenth anniversary of the author's death.

TEACHERS' TRAINING INSTITUTIONS.

The reorganization of the elementary and high school education led directly to the reorganization of teachers' training institutions.

[1] Under the Bolshevik régime the ministries were changed to commissariates, the post of the minister being superseded by a "people's commissary."

All such institutions were defined and classified into two main groups: Normal schools and teachers' institutes. The former were to serve as feeders of teachers for the lower elementary schools, the latter to prepare candidates for the teaching profession in the higher elementary schools. License of teacher in a higher elementary school is granted only to candidates who had experience in teaching for not less than two years.

HIGHER EDUCATION.

Russian universities, previously under strict control of the State, were granted practical autonomy by a decree of the Provisional Government issued in June, 1917. The university council became an important factor in the life of the university; and the system of election, until now limited to the rector, the dean, and the secretaries of the various faculties, has been extended to include also university professors. Because of the scarcity of persons capable of filling university chairs, the requirements for candidates have been somewhat relaxed. According to a new project worked out by the commission of the reorganization of higher education, Russian scientists, distinguished by their pedagogical activities and possessing doctors' degrees in philosophy conferred on them by foreign universities, may be eligible to a professorship.

Admission of students to higher educational institutions has undergone a sweeping change since the publication of the ministerial circular of June 13, 1917. All restrictions hitherto imposed upon various nationalities, denominations, and creeds have been abolished. This regulation affects primarily the Jews, who had been admitted to higher educational institutions in very limited numbers only. Their admission to universities within the so-called Jewish pale—that is, roughly speaking, Poland and southwestern Russia—was limited to 10 per cent, in other provincial universities to 5 per cent, and in Petrograd and Moscow to 2 per cent of the total enrollment of students.

Another feature of the new law was freedom in selection of a university institution. This repealed the law of 1899 by which students were restricted in their choice of a higher institution to their own educational district.

NEW UNIVERSITIES AND FACULTIES.

Plans to open new universities and faculties, long a dream of prerevolutionary authorities, materialized in the early days of new Russia. Among the most important measures one must note the change of the Demidov Lyceum of Law in Yaroslav into the Yaroslav University, with the faculty of law, and the Perm branch of

the Petrograd University into an independent institution. Further, the Saratov and Tomsk Universities, created shortly before the revolution, were enlarged by additional faculties. These additions compensated in a way for the loss of two universities which had fallen into the hands of the enemy—the Yuryev University, in the Baltic Provinces, recently reconstructed by the Germans, and the Warsaw University, in Poland, controlled at present by the Poles.

TECHNICAL EDUCATION.

Technical education was given a great deal of attention. The elementary and secondary institutions were graded and given a definite program. Their aim was not only to prepare skilled mechanics but also technicians capable to execute work designed by an engineer. Successful practice in a given field for at least three years entitles the practitioner to promotion. In addition to regular technical schools, the provisional authorities opened courses in the various branches of industry. In order to bring the instructors of technical institutions in touch with the industrial world, provision was made to assign them every three years to factories and industrial plants. To cover the expenses entailed by this act the Provisional Government assigned 3,000,000 rubles (1 ruble equals 51 cents), in addition to the amount named for the same purpose by the prerevolutionary authorities.

In line with the reforms pertaining to technical education of the lower and intermediary grades is the progress made last year in the field of higher technical education.

Among the new institutions opened recently should be mentioned the polytechnic institutes in Tiflis and in Nizhni-Novgorod. The latter was created in place of the Warsaw Polytechnic School, which at the beginning of the German occupation of Poland was transferred farther east to Nizhni-Novgorod, and later turned into a Russian institution.

ADULT EDUCATION.

The need of education for the adults was at no time so poignantly felt as in the days following the overthrow of czardom. The masses, awakened to the importance of the movement, realized their ignorance, and demanded from the new authorities what was so long denied them by the czarist régime. Schools for adults were opened everywhere, and the intelligent circles, eager to assist the Government, proffered their help by instituting many primary schools and courses in agriculture, rural economy, and industrial and economic cooperation suited particularly to the needs of the rural population.

PRESENT CONDITIONS.

Unfortunately, no information is available relating to present educational conditions in Russia. It is not possible to state, therefore, what changes in this respect have occurred since the overthrow of the Kerenski régime in November, 1917, nor to what extent the plans described herein have been continued.

GERMANY.

The development of education in Germany during the past two years must necessarily remain obscure until the sources of direct information are again opened up. From extracts and references here and there the educational situation does not appear to have been very happy, and, if reports such as the following may be trusted, the educational machinery so carefully built up seems to have failed at the crisis. Writing in the Vossische Zeitung of January 23, 1918, Dr. Paul Hildebrandt contrasts the early enthusiasm manifested by the German school children and their war activities with the situation at the beginning of the present year:

> The sixth-grade pupils of 1914 are now about to be promoted to the upper third. They have become accustomed to the war. Who can wonder, then, that now in the fourth year of war our children exhibit signs of change? Too many of the restraints have been removed which should shape their development—the loosening of family ties, the father at the front, the mother employed away from home, and in the lower ranks of society doing the work of men; the relaxation of school discipline. Of the teachers of the Berlin public schools, for instance, two-thirds have gone into the army. The remainder are overworked. Dropping class periods or combining classes together are the order of the day. In the higher schools half of the teachers are in the army. Furthermore, standards in the higher institutions of learning have gradually been lowered until the final examination has been pushed back fully two classes. All these conditions have influenced our students and have weakened their persistence, since they see that they can attain a scholastic standing without effort that formerly demanded the severest application.
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> Young people follow the law of their nature. They are guided by the impressions of the moment, and they can not permanently resist them. In addition, as time went on, especially in case of the students of higher institutions, and particularly in the towns, the hardship of inadequate nourishment appeared. It is the unanimous judgment of medical specialists that the children of the middle classes suffered most in this respect. General attention was attracted to the fact that the children were less sensitive to reproof, that they paid no more attention to threats, because the school authorities had directed that they should be treated with every leniency, and since promotions no longer represented any definite standard of accomplishment. This special consideration for the children was most obvious in the schools of the large cities. Was not harvest work and the country vacation necessary to maintain the health of the coming generation, and was it not necessary for a great many to be set back in their studies so that they required repeated concessions to maintain their rank and thereby continually lower scholastic standards of their classes?

That spirit of voluntary service which at the beginning of the war revealed itself in its fairest aspect has now disappeared. Everywhere we hear lamentations over the increasing distaste shown for military service. Pupils collect articles now for the reward, not from patriotism, and the older pupils have their struggles. Shall they take advantage of the opportunity to leave school with a half-completed education, or shall they avoid placing themselves in a position where they will have to enlist for their country? What an unhappy indecision even for the best of them, those who really think about the matter.

Furthermore, in those ranks of society which are less influenced by tradition, discipline, and education we find increasing violations of the law. At the first this manifested itself merely in an increase of theft. More recently it has taken a decided turn toward personal assaults. It is true the latter are still negligible in proportion to the total number of juvenile offenses, but they are increasing every year. Already the number of violent crimes committed by youths in the city of Berlin is more than three times the number reported in 1914.

Thus dark shadows are falling over the brilliant picture of 1914. Every disciplinary influence, every effort of the still fundamentally sound German Nation, must be exerted to oppose this tendency and to lead the children back to the path of rectitude.

Another picture, but one also indicating the difficulties that attend the conduct of the schools, is given in the Leipziger Volkszeitung for February 8, 1918:

The Saxon minister of education recently drew attention in the Saxon Diet to the injurious effects produced by the war on the elementary schools of the Kingdom. In addition to the shortage of fuel, which last year frequently necessitated the closing of schools and this year has required the removal and amalgamation of the whole schools, the unsatisfactory health of the teachers has had an undesirable effect.

War conditions, according to the minister, have caused great emaciation and premature aging, and have diminished the capacity for work (alike physical and intellectual) and the sharpness of the senses. This state of things is attributed not only to the food supply situation, but also to the increased difficulty and extent of the professional work falling upon teachers (only 8,965 elementary-school teachers were at work in Saxony on Oct. 1, 1917, as compared with 14,800 before the war), and to the large amount of auxiliary service imposed upon teachers in connection with war economic measures.

These accounts hardly seem to be in keeping with the eulogies heaped on the German school system during the first two years of the war in the daily press, in professional magazines, and by the Government. It was then felt very universally that the elementary school, the training ground of the discipline and physical strength and comprehensive culture that characterize the German soldier, had triumphed signally over the illiterate Russians and Italians, as well as the decadent French and treacherous English. It was the elementary schools that produced the patriotic, loyal, thorough soldier whom the consciousness of a good cause carried to victory. This unguarded flattery of the elementary schools and their teachers

helped somewhat to give a new impetus to a movement to which attention had been redirected just before the war. At an educational conference which met at Kiel in June, 1914, and was attended by representatives of all branches of education, it was urged with much enthusiasm that higher education be made accessible to as many classes in society as possible, so that intelligence might be recruited wherever it was found. Opportunity for ability could best be furnished through the establishment of the Einheitsschule or common-school systems. The idea of Einheitsschule has a long history in Germany; it has always been advocated by the leaders of progressive politics and thoughtful educators. When last agitated in the eighties Profs. Rein and J. Tews, now the *doyen* of the elementary-school teachers, were associated with the movement as they now are with its revival. The principle underlying the system of the Einheitsschule is that all pupils between the ages of 6 and 12 shall have a common foundation, to be followed by educational opportunities thereafter suited to their abilities. This implies the elimination of the Vorschule or special fee-paying school, which prepares pupils from the ages of 6 until their entrance into the secondary school at about the age of 9. It is a distinctly class school. The further implication of the Einheitsschule is the postponement of the beginning of secondary education to 12, a change that has much to commend it on grounds other than the provision of democratic opportunities, and is at least a better age at which a correct choice of a course and a career can be made than 9.

A new stimulus was given to the movement in the early days of the war, when politics were adjourned, when enthusiasm and victory had welded the nation together as one, and when Hindenburg was claimed to be superior to Hannibal and the captain of the *Emden* to Leonidas. The commercial and industrial classes had, it was generally felt, proved themselves equal to the demands of the hour. The greatest failure had appeared among the political and diplomatic leaders. The demand was at once renewed for the establishment of a common school from which pupils of promise in all classes of society might be recruited to place their intellectual abilities at the service of the state and to furnish an intellectual and spiritual reserve to make up for the physical and intellectual losses incurred during the war. It was no longer a question of providing an easy path (*Bahn leicht*) for ability but an unobstructed path (*Bahn frei*). The war changed the aspects of the problem; the need of the hour was a German national school for all, with opportunity for all to cooperate in promoting the great aims of the German cultural state. National unity could only be advanced by a national common school, which, according to the progressives, including the Deutsche Lehrerverein and the social democrats, must be established as a free, undenominational, and nationally uni-

form institution, placing gifted children of the poorer classes on the same footing for promotion to higher education as the children of the richer classes. Cultural and social equality must be established for the working classes who were anxious to play their proper part in the development of common national aims. They desired not so much to reach the top, but that their abler members should have opportunities opened to them suited to their ability, without reference to school privileges and certificates. For the worker the question is not so much "How can I raise my son socially through education?" as "How can I secure for my class, or rather its abler members, appropriate influence on the administration of the state and of the community in industry, commerce, transport; and how can I put an end to the influences of privilege that are socially detrimental?" Selection for educational advantages must in the future be based, in the opinion of the advocates of the movement, not on privilege but on the common right of all classes. The proposals for the Einheitsschule are well summarized in a resolution passed in June by the Association of Prussian Women Teachers' meeting at Hannover:

> National unity, returning stronger than ever after the war, will demand a unified school system for all Germany. The reconstruction of the whole system will have to be made with a single compulsory elementary school as its foundation. Reasons for this are of different kinds; reasons of social justice, that every gifted child shall be able to advance to a higher education; national and economic reasons, that the state shall be able to make use of all native talent in the most suitable place, and shall be able to economize on the heavy and useless expenses which are incurred by the presence of poorly endowed scholars in the secondary schools.

Karl Muthesius, long a leader in educational affairs, is opposed to class barriers and restrictions on intellectual development merely because of poverty. The elementary school up to 12 must be the national school, offering a common foundation for all; beyond this opportunities must be created for differentiation according to the needs of the individual and of the nation. The common school must be free from clerical control and permitted to be self-directing. He expresses his opposition to the classical tradition in days when German culture is fully developed to furnish a sound basis for education. Prof. Rein, in a work edited by Fr. Thimme,[1] in which are collected the opinions of leading Germans on the subject under discussion, declares himself most emphatically, as might be expected, in favor of the common school, whose establishment would make a real and effectual contribution to the development of national feeling in the hearts of all children. Such an organization would give inner unity to the whole system of moral culture in Germany.

Opposition to these claims was immediately aroused and came from the secondary schools, teachers of traditional subjects, school

[1] Thimme, Fr. Vom inneren Frieden des deutschen Volkes. Leipzig, 1916.

inspectors, administrative officials, and the clerical and conservative elements in politics. The secondary-school teachers in general feared overcrowding of their schools. The specialists were alarmed at the thought of the postponement of the beginning of secondary education from the age of 9 to 12 and the consequent lowering of standards. The inspectors and administrative officials produced arguments against a radical change based on considerations of the good of the lower classes; higher education would only lead to unrest and discontent, to dissatisfaction with the social position of parents, and ambitions for higher positions that are limited in number; pupils from poorer homes and humbler environments do not enjoy the same advantages and opportunities that are possessed by the children of the upper classes, a condition that in itself might be fraught with danger consequent on the sudden transfer from a humble to a higher status. In any case the work of the elementary schools furnishes no criterion for the selection of pupils for advancement to higher education, so that early selection would be surrounded with risk for the aspiring pupil, while no account would be taken or provision made for late development. It would also be unjust to the elementary-school teachers to deprive them of the pick of their product, and the promotion of gifted pupils would mean the withdrawal of an ever-present incentive to the less well endowed. If the views of the radicals were realized and the selection of able pupils for advancement to secondary schools were made by the schools, the rights of parents would be outraged; at the most, all that the schools should do would be to advise parents and allow them to act if they choose. The fear was also expressed by no less an authority than Rudolf Eucken that the realization of the common-school proposal would endanger traditional values in school, lower standards, compromise the precious things of German culture, and in the last analysis lead to the establishment of private schools and the perpetuation of a social class to preserve these heritages. Curt Fritzsche,[1] in a work on the Einheitsschule, claims to see the purport of the whole movement in the reception accorded at the Kiel congress of 1914 to the declaration of two French delegates that it represented the international ideal common to all Europe—clearly the aims and tendencies of the movement are internationalism, democratization, radicalism, antireligious secularization, egoism, and social feuds.

Early in 1916 the subject came within the realm of practical politics, when the educational estimates for 1916–17 were brought up for debate in the Prussian House of Representatives (Abgeordnetenhaus). The social democrats and the progressive volksparten came forward with a demand for the abolition of the vorschule and the

[1] Fritzsche, C. Die Einheitsschule in Bibliothek für Volks- und Weltwirtschaft, No. 21. Dresden, 1916.

throwing open of opportunities for ability in whatever grade of society it might appear. The vorschule is merely a school for those privileged by class who made no other use of their educational opportunity than to advance as far as the einjährigenzeugnis. If the principle of the einheitsschule were adopted the best pupils would pass on completion of their elementary school course to the secondary school and in five or six years obtain the reifezengnis, or certificate of maturity, that would admit them to the universities. Both proposals met with opposition from the conservatives and the clericals, who feared that the common-school movement would involve secularization. They were prepared to grant one concession—that the transfer of pupils from the elementary to the secondary schools should be made as easy as that from the vorschule. On behalf of the Government the minister of education admitted the need of establishing facilities for transferring able pupils from the elementary to the secondary schools and suggested the organization of a mittelschule for this purpose. He referred to an experiment that had already been conducted in Berlin whereby pupils from elementary schools were transferred to the quarta class, or third year of the realschule, and in four years attained to the einjährigenzeugnis. Such pupils could then move on to the oberrealschule and at 19 or 20 be ready to pass on to the universities.

In the middle of 1916 announcements appeared in the press that the ministry of education was preparing regulations to enable fit and selected pupils after three years in an elementary school to be transferred without further examination to a secondary school, thus enjoying practically the same privilege as the pupils of the Vorschule with the difference that, if found deficient, they could be returned to the elementary grades. This proposal met with a storm of opposition; it was feared that the secondary schools would be invaded and that the teachers and principals of these schools would not have the power to turn pupils back to the elementary schools. The result was that the ministry denied that it was even considering such a suggestion, and stated that it was merely planning to codify the regulations for the entrance examinations to secondary schools which had remained unchanged since 1837. When the new regulations were issued in August it was found that they benefited the Vorschule rather than the elementary schools.

The question of the Einheitsschule again came up in the course of the debate on the estimates for 1917–18, and the Government was now compelled to act. The position of the minister of education showed clearly that the ground had been shifted. From the consideration of the Einheitsschule and of plans for facilitating the transition from the elementary to the secondary school, the problem had

been narrowed down to that of selecting gifted elementary school pupils for advancement to higher education. The minister announced that he had, early in 1917, addressed the following questions to all district inspectors:

(*a*) In what elementary school organizations can a good pupil pass into Sexta of a secondary school without necessitating special arrangements or alterations in the school program?

(*b*) If such organizations do not exist, what changes would have to be made in the program to render these transfers possible?

(*c*) Can such changes be made without disadvantage to the other students? If not, suggestions should be made for special arrangements to meet the needs of the gifted pupil.

It was announced that an experiment was being conducted by the Government at Königsberg, and plans were in progress for dealing with the needs of gifted children in Berlin, Frankfort, Breslau, Mannheim, and Hamburg.

The new movement for the selection of gifted and exceptional children seems to have had the effect of checking completely any further demands for the Einheitsschule. In the school systems to which reference is made above Begabtenschulen have been or are in process of being established, and it is not improbable that this compromise will be accepted by both sides. Nowhere has a common school been put into operation, and teachers' associations appear to have been active in promoting the new experiments, which are limited to facilitating access to middle and secondary schools to gifted and exceptional (*Begabten and Hochbegabten*) pupils in elementary schools.

In Berlin such an experiment was introduced on the suggestion of Geheimer Justizrat Cassel, a member of the Progressive Volkspartei, who urged in the Prussian Abgeordnetenhaus in 1916 the establishment of facilities in each Province to enable pupils on finishing the elementary schools to continue to a higher school and reach the Reifezeugnis or maturity certificate in five or six years. Such a plan, he stated, would be of advantage to children of poor parents in larger cities as well as to children in small towns and rural areas who could enjoy the blessings of home influences up to 14. Dr. Reimann, the director of education for Berlin, adopted the suggestion and the Begabtenschule was established in 1917 for the admission of exceptional and studious pupils who have completed the first seven years of the elementary school course. The work of the Begabtenschule begins with that of Untertertia of a secondary school; during the first year the pupils are under probation and, if they fail to meet the standards, may be discharged—that is, at the age at which they would ordinarily have reached the close of the compulsory attendance period. After two years—that is, after Untersekunda—a choice is open between the course of a gymnasium

or of a realgymnasium. The schools do not grant the privilege of one year of military service but after six years lead to the maturity certificate which admits to the university. The Begabtenschule is open to able pupils of all classes; fees are remitted for poor pupils, and books and, in case of need, maintenance grants up to 300 marks ($75) a year are granted. The pupils must be recommended by their schools and are selected on the basis of psychological intelligence tests. The first tests were conducted by W. Moede and C. Piorkowski, psychologists who had met with success in selecting motor transport drivers for the army by tests which were used in all sections of this branch of the service. This selection is based on tests of attention and concentration, memory, combinations, wealth of ideas, judgment, intention, and observation. The authors of these tests declare that "reviewing the precise results of the analytical and systematic tests, the professional psychologist can not refuse to accept the responsibility for his decisions based on good scientific principles." Dr. Reimann plans to test pupils with artistic or technical bent and select them at 13 or 14 for higher trade schools to train as painters, jewelers, designers, embroiderers, cabinetmakers, lithographers, and other crafts. Dr. H. Rebhuhn has prepared an observation sheet which was presented by the Association for Exact Pedagogy to the city school board to be used by teachers as soon as pupils commence to show marked ability, and so serve as a record from the second year up.

A similar plan was inaugurated at Leipzig for boys and provision will be made for girls. Special classes were established at a reform school and an Oberrealshule closely coordinated with the elementary schools. The course begins in Untertertia with intensive study of French for three-quarters of a year, when English or Latin are taken up. After another year the pupils are ready to take their place in the normal class of the school (Untersekunda). Tuition, books, and maintenance allowances are granted in case of need. Since the number of selected pupils is restricted to 20 each year, they are the very exceptional only (*hervorragend Begabten*). In order not to flood the academic and professional careers, similar experiments will be attempted in other schools, e. g., school of commerce, technical school, and trade schools.

A somewhat different plan has been adopted at Hamburg, where it was originally intended to establish a transition or special class to coordinate the elementary secondary schools. In place of this, owing to the insistence of the teachers and the House of Burgesses, a type of school is organized that avoids such half measures. At 10 years of age—that is, on completing the fourth school year—pupils are especially selected for the new schools, of which 22 have been established (14 for boys and 8 for girls), to provide either a four-year

German course or a five-year course with foreign languages. These schools are similar to the Prussian middle schools and carry the privilege of admission to certain higher trade schools and to the State examination for the one-year military privilege. The pupil who completes the courses of such schools can, by way of the Oberrealschule or the Realygymnasium, pass on to the universities. The selection of the gifted pupils is based partly on the psychological observations by the teachers and psychological tests by an expert, for both of which Dr. W. Stern, of the Psychological Institute, is responsible. The psychological observations are recorded in a specially prepared folder indicating the home conditions and school record of the pupil, his adaptability, attentiveness, susceptibility to fatigue, powers of observation and comprehension, memory, imagination, thought, language, industry, disposition and will power, special interests, and abilities. The psychological tests include the logical arrangement of ideas, explanation of concepts, completion test, building of sentences on the basis of key words, the derivation of the moral of a story, the discovery of illogicalities, the finding of a legend for a series of pictures, and test of attentiveness. Stern claims that the cooperation of the teachers makes the Hamburg system superior to the Berlin plan of selecting on the basis of tests alone; it should also be mentioned that the selection in Hamburg is under the supervision of a committee of the superintendent, inspectors, principals, teachers, and psychologists. For pupils who develop at a later stage than those for whom these arrangements are made, transition has been established in two Realschulen, in which after one year they can pass on to the last year of the school and qualify for the one-year military privilege.

Breslau has established special classes for boys and girls of great ability (hochbegabten) selected at about the age of 12 by a psychological expert on the basis of intelligence tests similar to those used in Hamburg. Pupils who succeed in these schools will be encouraged by the city to proceed along suitable lines. The city will look after the education of selected pupils who may thus be under the observation of the psychologist until they pass into their chosen vocation. Facilities have been instituted in Charlottenburg to enable gifted pupils to advance more rapidly in the elementary schools and complete the work of a middle school. At Frankfort gifted pupils, on leaving the elementary schools, may be prepared in one year to enter Untersekunda of an Oberrealschule, and in four years to attain the Reifezeugnis. The Mannheim[1] system is well known in this country.

The experiment is thus confined to the larger towns, and complaints are already heard that the State should take over the further development of such plans to bring them within the reach of all. In the

[1] See Auxiliary Schools of Germany. U. S. Bureau of Education, 1907, Bulletin No. 3.

meantime critics even of this precipitate of the more ambitious and more democratic movement for the Einheitsschule are not wanting. There are those who express concern lest the gifted pupils become spoiled and conceited; that selection in itself would set up class distinctions; that school ability is not necessarily a guarantee of ability in after life; that pupils should not be selected on the basis of school marks but on the basis of character, pronounced bent, and moral force. Further, the plans involve the danger of robbing the lower classes of their intelligent members, of depriving industry of its abler workmen, and of overcrowding academic and professional careers. Finally, faute de mieux, psychological tests are not yet sufficiently developed to serve as a basis of sound and scientific diagnosis, and are inadequate until they have found a more extensive place in the schools. It is clear that the mind of the German reactionary follows the same kind of logic in domestic as in foreign affairs.

III.

ACTIVITIES OF THE BUREAU OF EDUCATION.

THE CAMPAIGN FOR SCHOOL ATTENDANCE.

The whole strength of the Bureau of Education has been directed without cessation during the past year to the effort to maintain the schools of the country at full efficiency during the war.

There was need of the effort. The declaration of war came in the midst of the second semester of the school year, 1916–17. The attendant excitement threatened to demoralize the entire work of instruction even before the real effects of war measures began to be felt. During the summer vacation of 1917 large numbers of students and of teachers volunteered for military or naval service. The enrollment at the beginning of the new term was, as a whole, larger than had been expected, but the numbers soon began to decline, as the voluntary enlistments increased and as young men and boys left their books to accept employment in the industries at wages that were high beyond all precedent.

Professors and instructors in colleges and high schools were in demand for scientific work for the Army, Navy, and Government departments, and for responsible positions in commercial and manufacturing establishments. Women teachers discovered that they could earn a great deal more as clerks than as teachers, and many of them resigned their positions without hesitation. The cost of all supplies and materials advanced rapidly, making it impossible with a fixed income fully to provide for the needs of the schools. All these difficulties increased as the months passed, and the number of men called to military service increased, for each man called left one more place to be filled in the productive industries.

The most earnest efforts of school officers of every degree were required to save the schools from serious deterioration. The Commissioner of Education foresaw the results that would follow the unfavorable occurrences that were taking place, and threw all his energy into a campaign to nullify them. Appeal after appeal was made to all those who were concerned in the situation and to those who seemed able to exercise any influence in overcoming the conditions that militated against the welfare of the schools. Parents

were urged not to take their children prematurely from school, in order that they might not be deprived of the advantage justly due them; high school and college boys were urged to continue their attendance until the completion of their courses, in order that they might serve their country as trained leaders rather than as common soldiers or unskilled workmen; teachers were urged to remain at their posts developing the intellect of growing children rather than to desert them for tasks which might as well be done by others; chairmen of school boards were urged to increase the salaries of teachers in order that they might not be led into less important callings because of the lack of compensation sufficient for decent and suitable living; high Government officers were urged to make arrangements for the draft and other demands upon the services of men which would avoid injury to the schools; and clergymen, editors of all classes of journals, labor leaders, parent-teacher associations, women's clubs, as well as school superintendents and heads of all educational institutions, were urged to exert all the powers that in them lay to induce parents, students, teachers, school boards, and public officers to strive to the utmost to maintain the normal school attendance and the normal standard of instruction.

The Secretary of the Interior and the President of the United States have cordially supported the Commissioner of Education in this campaign. The President has written two characteristic letters in its behalf which were reproduced and distributed far and wide by the Bureau of Education.

They were as follows:

THE WHITE HOUSE,
Washington, 20 July, 1917.

MY DEAR MR. SECRETARY: The question which you have brought to my attention is of the very greatest moment. It would, as you suggest, seriously impair America's prospects of success in this war if the supply of highly trained men were unnecessarily diminished. There will be need for a larger number of persons expert in the various fields of applied science than ever before. Such persons will be needed both during the war and after its close. I therefore have no hesitation in urging colleges and technical schools to endeavor to maintain their courses as far as possible on the usual basis. There will be many young men from these institutions who will serve in the armed forces of the country. Those who fall below the age of selective conscription and who do not enlist may feel that by pursuing their courses with earnestness and diligence they also are preparing themselves for valuable service to the Nation. I would particularly urge upon the young people who are leaving our high schools that as many of them as can do so avail themselves this year of the opportunities offered by the colleges and technical schools, to the end that the country may not lack an adequate supply of trained men and women.

Cordially and sincerely, yours,

WOODROW WILSON.

HON. FRANKLIN K. LANE,
Secretary of the Interior.

THE WHITE HOUSE,
Washington, 31 July, 1918.

MY DEAR MR. SECRETARY: I am pleased to know that despite the unusual burdens imposed upon our people by the war they have maintained their schools and other agencies of education so nearly at their normal efficiency. That this should be continued throughout the war and that, in so far as the draft law will permit, there should be no falling off in attendance in elementary schools, high schools, or colleges is a matter of the very greatest importance, affecting both our strength in war and our national welfare and efficiency when the war is over. So long as the war continues there will be constant need of very large numbers of men and women of the highest and most thorough training for war service in many lines. After the war there will be urgent need not only for trained leadership in all lines of industrial, commercial, social, and civic life, but for a very high average of intelligence and preparation on the part of all the people. I would therefore urge that the people continue to give generous support to their schools of all grades and that the schools adjust themselves as wisely as possible to the new conditions to the end that no boy or girl shall have less opportunity for education because of the war and that the Nation may be strengthened as it can only be through the right education of all its people. I approve most heartily your plans for making through the Bureau of Education a comprehensive campaign for the support of the schools and for the maintenance of attendance upon them, and trust that you may have the cooperation in this work of the American Council of Education.

Cordially and sincerely, yours,

WOODROW WILSON.

HON FRANKLIN K. LANE,
Secretary of the Interior.

The interest of the Secretary of the Interior has been repeatedly manifested in the campaign for the maintenance of the schools at normal efficiency. In February, 1918, he called a conference of representatives of the War Department, Navy Department, Department of the Interior, Department of Agriculture, Department of Labor, and the Civil Service Commission for the purpose of considering the needs of the several departments in relation to the schools. After several conferences the following statement was prepared and formally approved by the heads of all the departments concerned:

THE NEED IN AGRICULTURE.

Before the opening of the war there were in the United States about 6,000,000 farmers, and about an equal number of farm laborers. There are farm labor difficulties to be overcome in many parts of the Union. In some sections the situation is acute.

Aside from casual work, chores, and the like, which might be done outside of school hours, the labor of boys under 14 years of age is not a vital factor on the farm. City boys, without farm experience, are not generally useful under 16 years of age. In some lines of farm work unskilled boys can be used in part, under skilled direction. In some lines of work a bright, strong boy can step in, without previous experience, and be of use almost from the first day. There are, of course, some kinds of farm work that a boy without farm experience can not be expected to do without training. In any case, intelligence, good health, and good physical development are essential for useful service on the farm.

One of the urgent needs on the farm to-day is for capable women to help with the housework. Without such help many farms could not take on additional farm laborers, even if they were available, because of the added labor involved in providing meals and lodging.

THE NEED IN THE ARMY AND NAVY.

The Army and Navy do not want, and can not use, boys under 18 years of age, nor boys nor men of any age who are not strong and well-developed physically. So far as the Army and Navy are concerned, there is nothing more important that the schools can do than to keep going at full capacity, and at the same time to emphasize in every possible way their work in physical education. High school boys will render the best service of which they are capable by remaining in school until completion of the high school course.

As soon as the Army is able to announce definitely its need of men possessing certain technical and trade qualifications, it will be necessary for large numbers of young men 18 years of age and over to respond by taking the training courses that may be provided to prepare them in the shortest possible time. But, in the meantime, nothing can possibly be gained by boys doing otherwise than to continue in school, laying the very best possible foundation for such subsequent training. If they are wanted, they will be called.

If the schools will carefully select boys having suitable physical development and other necessary qualifications, prepare them for the various branches of agricultural work, and send them out to service on the farms under proper auspices during the approaching vacation, they will undoubtedly be offering greater relief in the present emergency than would be possible by attempting to carry on any work immediately under the Army or Navy.

Vigorous physical training under discipline furnishes excellent preparation for civil or military usefulness later on. Such value as formal military drill in the high schools may have, however, is more likely to be through keeping the boys satisfied to remain in school than as a contribution to the immediate military strength of the country.

THE NEED IN CIVIL SERVICE.

There is a strong demand for clerks, stenographers, and typewriters, but the places can not be filled by boys and girls under 18 years of age. No advantage would accrue to the civil service in any way by shutting down the schools or by curtailing school facilities.

Many civil service positions have been filled by drawing workers from commercial and industrial houses, and also by drawing teachers from the schools. All of the positions thus made vacant must be filled from some source. Therefore, schools could undoubtedly render a much-needed service by organizing classes to train stenographers, typewriters, clerks, and secretaries.

THE NEED IN INDUSTRY.

Many industries and commercial establishments could use capable boys and girls for various kinds of service, but Government officials maintain that no emergency exists which justifies proposing any relaxation of the laws safeguarding the working condition of young people.

Still more serious labor shortages in industry are anticipated, but boys and girls under 18 years of age should not be used to make up these shortages any more than can possibly be helped. It is easier to provide approved working conditions on the farm than in the mill or factory.

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS.

1. Conditions in different sections of the country are so diverse that no detailed policy will be uniformly applicable. Only general policies and principles may be adopted for the country as a whole.

THE ELEMENTARY SCHOOLS.

2. There appears to be nothing in the present or prospective war emergency to justify curtailment in any respect of the sessions of the elementary school, or of the education of boys and girls under 14 years of age, and nothing which should serve as an excuse for interference with the progressive development of the school system. Teachers and pupils may be encouraged to find ways of performing in the schools some service having war value, such as activities connected with the Junior Red Cross, war-garden work, Boy Scouts, war-thrift work, and the like. Opportunities should be found to introduce into the school activities having real educational value, which at the same time connect the public schools with the ideals of service and self-sacrifice actuating our people, and bring home to the consciousness of teachers, pupils, and parents the essential unity of the Nation in this great crisis.

3. In view of the progress that has been made in this country in the enactment of compulsory education legislation, it is assumed at the outset that there is no question that in the country and villages all girls under 14 years of age, and all boys under 12, might well continue in school through the summer, wherever the condition of the school funds makes this at all possible.

4. In the cities there would be no interference with the supply of needed labor if all children under 14 continue in school to the end of the regular session, and through the summer as well, and there would be but little interference if all children under 16 continue in school. With reference to boys and girls over these ages, the recommendations which follow indicate certain directions in which it is believed the school program may be modified when necessary to meet emergencies.

THE SECONDARY SCHOOLS.

5. One of the places in which there appears to be immediate demand for modification of the high-school program is in respect to the need for agricultural labor. Much valuable service can be rendered by carefully selecting and training boys to assist in meeting this demand. It can not be too strongly urged, however, that each pupil's case be considered individually, and no pupil should be excused from school for this purpose except with the written consent of the parents, to accept specified employment for a definite term, under responsible supervision by the school or by other approved agencies of the conditions of employment.

6. It would be helpful in cities, and especially in industrial communities, if, for boys and girls over 14 years of age in or out of school, certain definite courses could be introduced looking toward a cooperative half-time plan of school attendance and employment throughout the year.

IN GENERAL.

7. In general, it is believed that, wherever school boards can find the means, the present emergency is an opportune time for readjusting the schools on an all-year-round basis, with a school of 48 weeks, divided into four quarters of 12 weeks each. The schools would then be in continuous operation, but individual teachers and pupils would have the option of taking one-quarter off at prearranged periods for needed change.

8. If it is not practicable for the schools to change at once to the all-year-round program, a much-needed service can be rendered in many localities by organizing special summer and evening classes to train young people for the civil service, and to train stenographers, typewriters, clerks, and secretaries for the commercial world. In many communities numbers of adult women will be found who are free to avail themselves of special training to fit themselves for various kinds of positions in office and clerical work, taking temporarily the places of men called to the colors or to other employment.

9. Some schools should consider the possibility of arranging a schedule for certain groups of students having a definite prospect of service, in accordance with which the summer months would be spent in school, leaving the students free to work on the farms during planting time in the spring and again during harvest time in the fall. In still other cases, particularly in the smaller communities, time may be secured for farm work by omitting the usual spring vacation, by holding school on Saturdays, and otherwise speeding up, and thus completing the term's studies some weeks in advance of the usual date for closing the school.

10. Special programs of the type suggested in the preceding paragraph should be reserved in general for individual students or specially selected groups of students who have definite plans for proper use of the time thus taken from the school. In no case can justification be found for the general shortening of the school term in the expectation that *some* students *may* find places of useful service.

11. In response to definite requests from Government agencies, schools should be used from time to time for specific preparation of individuals for immediate service.

12. Boys and girls should be urged, as a patriotic duty, to remain in school to the completion of the high-school course, and in increasing numbers to enter upon college and university courses, especially in technical and scientific lines, and normal school courses, to meet the great need for trained men and women.

APPROVED.

For the War Department,
NEWTON D. BAKER, *Secretary.*
For the Navy Department,
JOSEPHUS DANIELS, *Secretary.*
For the Department of the Interior,
FRANKLIN K. LANE, *Secretary.*
P. P. CLAXTON, *Commissioner of Education.*
For the Department of Agriculture,
DAVID F. HOUSTON, *Secretary.*
For the Department of Labor,
WILLIAM B. WILSON, *Secretary.*
For the U. S. Civil Service Commission,
JOHN A. MCILHENNY, *Chairman.*

The interest of the Secretary of the Interior led him further to instruct the Commissioner of Education on May 15, 1918, to invite a conference of a few men of high standing in order that they might advise the Department of the Interior what course to pursue in urging young men and women to continue their college courses. The result is shown in the following report of the conference with

the accompanying letter from Secretary Lane to the Commissioner of Education:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, June 28, 1918.

SCIENTIFIC AND INDUSTRIAL TRAINING IN THE WAR EMERGENCY.

Statement of the problem.—The time has come when we must place before the country in definite and unmistakable terms the task which confronts us in providing men and women with the needed scientific, technical, mechanical, and agricultural knowledge and skill requisite for winning the war, and bring such pressure to bear that immediate and salutary action will result.

1. Regardless of the duration of the war, it will be followed inevitably by a period of reconstruction which will make demands no less exacting for an indefinite period thereafter.

2. It is impossible to exaggerate the importance of engineering knowledge and skill, in the broadest sense, not only directly in the conduct of military operations, but indirectly in the essential war industries. A high type of agriculture, to insure an unfailing food supply, is equally indispensable.

3. The engineering problems confronting the United States are indefinitely greater than those of any other of the great nations. For an average distance of more than 4,500 miles, across the continents and the seas, we must transport all of the men, munitions, and supplies which are to represent us in this great struggle. Furthermore, the Central Powers prepared themselves for this conflict over a long period of years, and by this means determined its character to their own advantage in large measure.

4. The loss by our allies of men of highly specialized training in the early stages of the war, and the difficulties in the way of recovery, leave this Nation in the position of trustee of the principal remaining sources of supply.

5. For the period of reconstruction there will be urgent need of large numbers of men and women trained in commerce, economics, and social and political science, in addition to those mentioned above.

6. To accomplish these ends an adequate supply of trained teachers in scientific and technical subjects is absolutely indispensable.

Action by the War Department.—These problems have received consideration by the proper officials of the War Department, and plans have been perfected for the organization of a Students' Enlisted Corps, which will develop as a military asset the body of young men in the colleges, while at the same time preventing the unnecessary and wasteful depletion of the college through indiscriminate volunteering, by offering to the students a definite and immediate military status.

Conference as to procedure.—In recognition of the importance of this matter Secretary Lane directed the Commissioner of Education to invite a small group of representative citizens to meet and advise with him in regard to what policy the Department of the Interior should pursue as to urging upon our young men and women the taking up or continuing of college and university courses during the war.

Invitations were sent to the following persons to meet in the office of the Secretary of the Interior on Friday, May 31, 1918:

Mr. Fuller E. Callaway, director, sales and finances, Callaway Development Co., La Grange, Ga.

Mr. Samuel M. Felton, president Chicago Great Western Railway; director general of Military Railways, War Department.

Mr. Edwin A. Alderman, president University of Virginia, Charlottesville, Va.

Mr. Alderman was unable to attend the first conference, at which time he was represented by Mr. William M. Thornton, dean of the College of Engineering, University of Virginia.

As the result of a series of conferences the Department of the Interior was urged:

1. To use all its influence to maintain at the highest possible standard of efficiency all of the processes of higher education, but especially those having to do with the future supply of men and women trained in scientific and technical subjects, including teachers in these fields.

2. To endeavor to secure, for this memorandum, including the recommendations which follow, the indorsement and support of those departments of the Government which are especially interested.

3. To secure early and widespread publicity for the conclusions of this series of conferences.

Conclusions and recommendations.—1. The people of the United States should recognize that the maintenance of the war strength of the Nation in its full power demands the utmost efforts of all existing well-organized and adequately equipped colleges, universities, and technical schools. This means ever-increasing and more devoted bodies of students as well as faculties.

2. Young people having the requisite qualifications should heed this urgent call of their country, and apply themselves diligently, enthusiastically, and in increasing numbers to the task of preparing for the highest service of which they are capable. Wherever practicable young men should at the same time join the Students' Enlisted Reserve and prepare for military service, in order to be ready for that call also when it comes.

3. Institutions of higher education should adjust their courses, so far as possible, to immediate war needs and to the demands which must inevitably come with the establishment of peace, and should develop especially those scientific and practical branches of study which are essential to the winning of the war, to the development of our industries and commerce, and to the accomplishment of the tasks of the civic and political life of the Nation.

4. Educational institutions should use every effort to make the opportunities and privileges of training for public service accessible to all suitably prepared men and women of college age. In the cases of many worthy young men and women this will require some pro-

vision for assistance in meeting payments for tuition and laboratory fees and other necessary expenses of higher technical training.

DEPARTMENT OF THE INTERIOR,
Washington, July 30, 1918.

DEAR DOCTOR CLAXTON: The recommendations of the commission invited by you in accordance with my instructions of May 15 to advise this department in regard to what policy it should pursue as to urging upon our young men and women the taking up or continuing of college and university courses during the war have my hearty approval. This is a matter of the greatest importance for our strength in war and for the future welfare of the country. You will, therefore, do all you can through the Bureau of Education and in cooperation with all other available agencies for the promotion of the policy recommended.

Cordially, yours,

FRANKLIN K. LANE.

DR. P. P. CLAXTON,
Commissioner of Education.

It is unnecessary to describe in detail all the appeals which the commissioner has made, or to reproduce all the different letters he has written. The following, which were sent respectively to 120,000 clergymen, to the heads of all teacher-training institutions, and to boards of education, will serve as specimens:

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, August 15, 1918.

DEAR SIR: I am inclosing a copy of a letter from the President of the United States to the Secretary of the Interior, and am appealing to you and other ministers throughout the country to assist us in this campaign for maintaining, at their normal efficiency at least, all schools of all kinds and grades during the war. The policy stated in the President's letter has been the policy of the Administration, including both the Department of War and the Department of the Navy, from the time we entered the war, and the events of the year have served to emphasize its importance.

Not only is it necessary for the welfare of the country and the safety of our democracy when the war is over; it is equally important for the strength of our country while the war continues. We would all hope that the war may end soon, but it may be very long, and in war a people must prepare for every possibility. If the war should be long, there will be great need in all the allied countries for large numbers of men and women of the best college and university training for service both in the Army and in the industries directly or indirectly connected with the war, and the colleges and universities of the United States must supply this need to a large extent for all the allied countries. In some fields, as chemistry and the various forms of civil and industrial engineering, the demand for trained men and women is already much greater than the supply. It is therefore a patriotic duty for young men and women who are prepared to enter college to do so and for those now in college to remain until their courses are completed, unless they are called for some service which can not be rendered so effectively by others. They should be encouraged to exercise that high form of self-restraint which will keep them at their studies despite all temptations for more immediate service until they are prepared for the expert work without which the devotion and efforts of millions will be of little value.

When the war is over and the days of reconstruction come, the call upon this country for men and women of the highest and best training for help in rebuilding the world will be large and insistent. For our own good and for the good of the world we should be able to respond generously. Conditions in this country and our position among the peoples of the world will require of us a higher level of intelligence and civic righteousness than we or any other people have ever yet attained. This must be insured largely through the education of our schools.

Parents should be encouraged to make all sacrifice necessary to keep their sons and daughters in school. Because of the increased cost of living this will not always be easy. Teachers should be encouraged to remain at their posts despite temptations of larger pay elsewhere. Men and women who have had successful experience as teachers and are not now in the schools should, wherever possible, be induced to take the places made vacant by teachers who have been drafted into the Army, or who have for other reasons left the schools. The people should be shown the necessity of increasing their appropriations for the support of the schools to meet, to some extent at least, the great decrease in the purchasing power of money. We must see to it that "no boy or girl shall have less opportunity for education because of the war."

There are before us now as a people just two tasks: To win the war for freedom and democracy and, let us hope, for a righteous and permanent peace; and to fit ourselves and our children for life and citizenship in the new era which the war is bringing in. Both these tasks must be accomplished thoroughly and well, at whatever cost of money and effort and at whatever sacrifice of ease and comfort may be necessary. All other interests for the present should yield to these.

Probably you will be willing to make this matter the subject of a discourse within the next week or two. It is important that it be brought to the attention of the people as effectively as possible before the time of the opening of the schools.

Yours, sincerely,

P. P. Claxton, *Commissioner.*

Department of the Interior,
Bureau of Education,
Washington, August 17, 1918.

Dear Sir: In a recent letter to the Secretary of the Interior the President of the United States expressed his pleasure that the schools and other agencies of education have been maintained so nearly at their normal efficiency since our entrance into the war and stated that this policy should be continued throughout the war as a matter of the very greatest importance, affecting both our strength in war and our national welfare and efficiency when the war is over.

I feel quite sure all thoughtful men and women will agree with the President in this matter and will do all they can to assist in carrying out this policy. But it must be remembered that for effective work the schools must have competent teachers, teachers having adequate education and professional training. On the character and ability of the teachers everything depends.

However, in most, if not in all the States, there has never been an adequate supply of educated and trained teachers for all the schools; and, for many reasons, the supply is less adequate now than it has been for many years. Thousands of men have been drafted or have volunteered for service in the Army. Other thousands of men and many thousands of women have quit the work of teaching for employment in industries, commerce, civil service, and clerical positions where they are paid better than for teaching. As the war con-

tinues and as the cost of living increases, and the demand for services of the kind teachers can render grows larger, the numbers of teachers leaving the schools for other employment will become still greater, and this tendency is likely to continue long after the war is over unless the salaries of teachers should be increased far beyond the present average. How are their places to be filled? By trained or by untrained teachers?

Unless the attendance at the normal schools and in departments of education in colleges and universities is much increased, most of these places must be filled by men and women without professional knowledge and with no special training for their work. In this case the character of the schools will inevitably deteriorate and the time of the children and the money appropriated for education will be to a large extent wasted.

It is, therefore, very important that for next year and for many years to come there should be more students in these schools for the preparation of teachers than there have ever been. Thousands of boys and girls who have finished their high school work might and should render their country a high type of patriotic service by entering these schools next fall, winter, or spring to prepare themselves for the work of teaching in the elementary and secondary schools, and I wish to urge as many to do so as can.

Yours, sincerely,

P. P. Claxton,
United States Commissioner of Education.

Department of the Interior,
Bureau of Education,
Washington, March 4, 1918.

Dear Sir: The cost of living has increased nearly 50 per cent since 1913 and approximately one-third since 1916.

Since 1913 wholesale prices have increased as follows: Food, 85 per cent; clothing, 106 per cent; fuel, 53 per cent; drugs, 130 per cent; home furnishing goods, 75 per cent.

If the war continues it may be expected that the cost of living will be higher next year and higher still the next. Prices for both skilled and unskilled labor have also increased, and large numbers of the better teachers of our public schools in many cities and States have already resigned to enter other occupations at salaries or wages amounting to from 50 to 200 per cent more than they were paid as teachers.

As a result, standards of efficiency in the schools are being lowered at a time when it is more important than ever before that they should not only not be lowered but should, on the contrary, be raised as rapidly as possible. Conditions which will follow the war will demand a higher standard of general intelligence, industrial efficiency, and civic knowledge and virtue than we have yet attained; and this can be had only through better education.

The country as a whole is interested in this matter no less than the States and local communities. The safety of the Nation and the welfare of the people are involved. I am therefore taking the liberty to write to you at this time urging that you will give this matter the most careful consideration now and that you will take such steps as may be necessary to maintain the schools under your control at their full efficiency, and to improve and readjust their work to meet the new and larger demands made upon them. To do this it will no doubt be necessary to increase the salaries of teachers in proportion to the increase in the cost of living and to wages paid for other kinds of work.

This will mean increase in taxes; but it should be remembered that there are now just two things of supreme importance for us as a people; to win the war

for freedom and democracy and to prepare our children for life and citizenship in the new era which the war is bringing on. Let us spare no effort to accomplish both fully and well.

Yours, sincerely,

P. P. Claxton, *Commissioner.*

To State, County, City Boards of Education.

EDITORIAL.

The Bureau of Education must disseminate information chiefly through the printed page. The act which established it in 1867 included a provision that the Commissioner of Education should present annually to Congress a report embodying the results of his investigations and labors, together with a statement of such facts and recommendations as would subserve the purposes for which the department was established, namely, the collection and diffusion of educational information.

No mention was made in the act of any other method of diffusing information. The commissioner would naturally be expected to devise means of his own for doing so, and the only requirement that the framers of the act thought it necessary to make was that of the Annual Report. For many years a bulky volume under that title was the principal means by which the bureau communicated with the educational world.

Occasional "special reports" and "circulars of information" were issued, but they were few in number, limited in circulation, and not usually of the kind to appeal to the rank and file of the teaching profession, even if larger editions had been possible.

A notable departure was made in 1887 when Commissioner N. H. R. Dawson began the publication of an excellent series of histories of education in the several States which were prepared under the direction of Prof. Herbert B. Adams, of Johns Hopkins University. Under Commissioner Harris the character of the Annual Report was greatly improved, and he introduced the practice of incorporating in it comprehensive monographs upon special topics, written by men of high standing. Furthermore, he increased the usefulness of the reports a hundredfold by splitting up the formidable volumes and sending each of the many chapters as a "separate" to those who were especially interested in that particular chapter. The entire report had previously been sent to correspondents as long as the supply lasted, although few could possibly be expected to read any considerable part of such a book.

Commissioner Brown followed the practices of Dr. Harris, whom he succeeded, in relation to the report, and in addition began in 1906 the publication of a series of pamphlets which he called the "Bulletin of the Bureau of Education." These documents are specially recog-

nized by law, and apparently they are a permanent part of the scheme of the bureau's publications.

Within recent years the activities of the bureau have expanded remarkably, and its publications have increased in number, scope, circulation, and influence, perhaps far beyond the dreams of the early commissioners.

Repeated changes of plan have been necessary to provide for the growing demand for the bureau's literature, and new devices have been adopted from time to time to extend the limited appropriations better to solve the increasing need. The ponderous volumes of the report were the greatest drain upon the printing appropriation, and its preparation required the undivided time of a large part of the personnel of the office. The differences from year to year in the statistical tables, which filled the whole of one of the two volumes, were not sufficient to justify their collection and publication every year. Every consideration of the most worth, therefore, demands that the annual report be reduced to bounds commensurate with its usefulness.

It is not intended to neglect the preparation of the statistics, which are perhaps the most valuable single contribution which the bureau makes to the fund of educational knowledge; but that material will be collected and printed every alternate year only. The same is true of the comprehensive discussions of the several forms of education which for several years past have comprised Volume I of the annual report. The two volumes will be published regularly as the "Biennial Survey of Education." The first of the series under this title is in preparation, and publication may be expected within a reasonable time. The several parts or chapters will be issued separately and distributed principally to those in the line of work discussed in the several chapters. Bound volumes will be issued later, in smaller numbers than heretofore, and distributed chiefly to libraries.

The method by which this bureau will communicate most frequently with the educational public will be, according to present plans, through a type of publications which is of recent growth, namely, "leaflets" and "circulars." These are always brief, and each is addressed to a special class of readers, containing suggestions or information which is expected to be valuable and useful to the recipients.

Information which it is desired to impart at once, without waiting for the slower process of printing, is frequently communicated by mimeographed letters or circulars. This method is especially favored when the information at hand is not entirely complete but sufficiently so to be useful. The substance of mimeographed circulars is usually issued later in printed documents.

Miscellaneous publications are issued upon occasion to serve special purposes and without regard to regular classification. These embrace such documents as those issued in behalf of the United States School Garden Army and like projects. This division of the bureau issues general leaflets describing the aim, methods for organization, and other facts regarding the army work. Besides these, leaflets are issued to the various sections of the United States that deal with the technical problems of garden cultivation. The United States School Garden Army also furnishes service flags, posters, and insignia without cost to those who have become members of the army. A Course of Study in Gardening for normal schools and a Manual of Fall Gardening for the young student-gardeners have already been issued. A Spring Manual will be published early in 1919.

To supplement all these classes of publications and to afford means of furnishing educational information with regularity, a semimonthly periodical called "School Life" has recently been established. This is at present a 16-page magazine. It will be issued during 10 months every year and will be sent gratuitously to administrative officials within the limits of the edition which the funds of the bureau permit. Others may subscribe through the Superintendent of Documents at the rate of 50 cents per year, which represents the cost of the mechanical work involved.

It issues also twice a month the Americanization Bulletin, devoted to the subject of giving to foreign persons in the United States instruction in the English language, the geography and history and ideals of the country, and other subjects necessary for intelligent and happy living among us.

It will readily appear from the foregoing that the whole theory underlying the publications has undergone a marked change during recent years. Formerly our documents were addressed principally, if not exclusively, to the administrative officers of school systems and educational institutions. Now they are still of a sort which is of use to those officers, but also to the classroom teacher as well. Some recent publications, in fact, were designed especially for classroom use, and one very important series, namely, the Lessons in Community and National Life, was written for the use of pupils themselves. This marks the most important development in the work of the bureau within recent years, and it is one of the radical changes brought about by the war.

Even the necessities of war, however, could not have caused such a change were it not for the fact that the law now permits the sale of public documents to schools and libraries at the cost of publication. It would be impossible, of course, for this office to undertake to supply the 750,000 teachers of the United States with any document, no matter how small; it would be all the more out of the question to supply

eighteen or twenty million children with literature. With the possibility of such a demand we could not print schoolroom material of any sort, but the situation is wholly different when we are called upon to enable the teachers or the children of the country to obtain at cost a document which the good of the Nation demands that they should have.

The documents issued between July 1, 1917, and June 30, 1918, were as follows:

The Annual Report of the Commissioner of Education for 1917. 2 volumes.

BULLETIN.

1916, No. 23. Open-air schools.
1916, No. 49. Medical inspection in Great Britain.
1917, No. 2. Reorganization of English in secondary schools.
1917, No. 8. Current practice in city school administration.
1917, No. 9. Department-store education.
1917, No. 10. Development of arithmetic as a school subject.
1917, No. 11. Higher technical education in foreign countries.
1917, No. 15. Studies in higher education in Ireland and Wales.
1917, No. 16. Studies in higher education in England and Scotland.
1917, No. 17. Accredited higher institutions.
1917, No. 18. History of public school education in Delaware.
1917, No. 19. Report of a survey of the University of Nevada.
1917, No. 22. Money value of education.
1917, No. 23. Three short courses in home making.
1917, No. 25. Military training of youths of school age in foreign countries.
1917, No. 26. Garden clubs in the schools of Englewood, N. J.
1917, No. 29. Practice teaching for secondary school teachers.
1917, No. 30. School extension statistics, 1915–16.
1917, No. 31. Rural-teacher preparation in county training schools and high schools.
1917, No. 32. Work of the Bureau of Education for the natives of Alaska, 1915–16.
1917, No. 33. A comparison of the salaries of rural and urban superintendents of schools.
1917, No. 34. Institutions in the United States giving instruction in agriculture.
1917, No. 35. The township and community high-school movement in Illinois.
1917, No. 36. Demand for vocational education in the countries at war.
1917, No. 37. The conference on training for foreign service.
1917, No. 38. Vocational teachers for secondary schools.
1917, No. 39. Teaching English to aliens.
1917, No. 40. Monthly record of current educational publications, September, 1917.
1917, No. 41. Library books for high schools.
1917, No. 42. Monthly record of current educational publications, October, 1917.
1917, No. 43. Educational directory, 1917–18.
1917, No. 44. Educational conditions in Arizona.
1917, No. 45. Summer sessions in city schools.
1917, No. 46. The public school system of San Francisco, Cal.
1917, No. 47. The preparation and preservation of vegetables.
1917, No. 48. Monthly record of current educational publications, November, 1917.

1917, No. 49. Music in secondary schools.
1917, No. 50. Physical education in secondary schools.
1917, No. 51. Moral values in secondary education.
1917, No. 52. Monthly record of current educational publications, December, 1917.
1917, No. 53. The conifers of the Northern Rockies.
1917, No. 54. Training in courtesy.
1917, No. 55. Statistics of State universities and State colleges, 1917.
1918, No. 1. Monthly record of current educational publications, January, 1918.
1918, No. 2. Agricultural instruction in the high schools of six eastern States.
1918, No. 4. Monthly record of current educational publications, February, 1918.
1918, No. 5. Work of the Bureau of Education for the natives of Alaska, 1916–17.
1918, No. 7. The bureau of extension of the University of North Carolina.
1918, No. 8. Monthly record of current educational publications, March, 1918.
1918, No. 9. Union list of mathematical periodicals.
1918, No. 11. A community center—what it is and how to organize it.
1918, No. 12. Monthly record of current educational publications, April, 1918.
1918, No. 13. The land grant of 1862 and the land-grant colleges.
1918, No. 14. Monthly record of current educational publications, May, 1918.

Teachers Leaflets:

No. 1. Opportunities for history teachers.
No. 2. Education in patriotism.
No. 3. Government policies involving schools in war time.
No. 4. Outline of an emergency course of instruction on the war.
No. 5. Certain defects in American education.

Reading Courses (Home Education Division):

No. 1. World's great literary Bibles.
No. 2. World's great literature.
No. 3. Reading course for parents.
No. 4. Reading course for boys.
No. 5. Reading course for girls.
No. 6. Thirty books of fiction.
No. 7. Thirty world heroes.
No. 8. American literature.
No. 9. Thirty American heroes.
No. 10. American history.

Home Economics Circulars:

No. 2. Current problems in home economics.
No. 3. Home economics teaching in small high schools.
No. 4. Principles and policies in home economics education.
No. 5. Government publications of interest to home economics teachers and students.
No. 6. A course in food economics for the housekeeper.

Community Leaflets Nos. 1 to 24. Lessons in community and national life.

Higher Educational Circulars:

No. 6. Contributions of higher institutions to national service.
No. 7. The importance of technical training in military service.
No. 8. Administrative organization of the college of agriculture.
No. 9. Effect of the war on student enrollment.
No. 10. Effect of the war on college budgets.
No. 11. The Bureau of Education and the educational survey movement.

Sanitation Leaflet No. 1. The story of a boy who did not grow up.
Secondary School Circulars:
No. 1. The secondary schools and the war.
No. 2. Organization of high schools in war time.

The following numbers of the bulletin were in the hands of the printer at the close of the year:

Training of Teachers of Mathematics.
Guide to United States Government Publications.
Curriculum of the Woman's College.
Public School Classes for Crippled Children.
Educational Survey of Elyria, Ohio.
Facilidades Ofrecidas a Los Estudiantes Extranjeros.
History of Public School Education in Arizona.
Americanization as a War Measure.
Vocational Guidance in Secondary Education.
Monthly Record of Current Educational Publications, June, 1918.
Instruction in Journalism in Institutions of Higher Education.
Monthly Record of Current Educational Publications: Index, February, 1917, to January, 1918.
State Laws Relating to Education.
Vocational Guidance in the Public Schools.
Industrial Education in Wilmington, Delaware.
The National Council of Primary Education.
Rural-Teacher Preparation in State Normal Schools.
The Public Schools of Columbia, South Carolina.
American Agricultural Colleges.
Resources and Standards of Colleges of Arts and Sciences.
Educational System of South Dakota.
Teaching American Ideals through Literature.

LESSONS IN COMMUNITY AND NATIONAL LIFE.

The war is bringing to the minds of our people a new appreciation of the problems of national life and a deeper understanding of the meaning and aims of democracy. Matters which heretofore have seemed commonplace and trivial are seen in a truer light. The urgent demand for the production and proper distribution of food and other national resources has made us aware of the close dependence of individual on individual and nation on nation. The effort to keep up social and industrial organizations in spite of the withdrawal of men for the Army has revealed the extent to which modern life has become complex and specialized.

These and other lessons of the war must be learned quickly if we are intelligently and successfully to defend our institutions. When the war is over we must apply the wisdom which we have acquired in purging and ennobling the life of the world.

In these vital tasks of acquiring a broader view of human possibilities the common school must have a large part.—*President Wilson.*

These considerations led the President in August, 1917, to direct the Food Administration and the Bureau of Education to organize the proper agencies for the preparation and distribution of suitable lessons for elementary grades and for the high-school classes. The President expressed the conviction that:

Lessons thus suggested will serve the double purpose of illustrating in a concrete way what can be undertaken in the schools and of stimulating teachers in all parts of the country to formulate new and appropriate materials drawn directly from the communities in which they live.

The instructions thus given involved a radical departure from all previous practices and traditions of the Bureau of Education. It meant nothing less than the preparation of a series of texts for the direct use of pupils and arrangements for their distribution through the only possible channel, namely, sale at cost through the Superintendent of Documents. No other officer is authorized under the law to sell any publication of the Government; free distribution was out of the question, for the printing required was far beyond the limit of the funds available to the bureau.

The plans finally perfected provided for the preparation of the text under the direction of Dr. Charles H. Judd and Dr. Leon C. Marshall, of the University of Chicago; the cost of preparation was borne by the Food Administration; the first edition, involving payment for composition, stereograph plates, etc., was borne by the Bureau of Education; the correspondence and all business arrangements were handled by the Editor of the Bureau of Education; the clerical force required was provided in part by the Bureau of Education and in part by the Food Administration; the actual distribution of the documents was conducted by the Superintendent of Documents, and all money received in payment of the lessons was transmitted to him.

The lessons furnished by Dr. Judd and Dr. Marshall were excellent. The purposes and principles of these lessons were thus described by Dr. Judd:

The Lessons in Community and National Life are intended first of all to lay the foundations for an intelligent enthusiasm for the United States. Our schools have lacked that emphasis on nationalism which has been characteristic of European schools. Even our history courses have been meager and have for the most part treated of periods so remote that pupils in the schools have not cultivated a true idea of the unique characteristics of our national civilization. Though we have a continuous system of free education and a broad view regarding the training of girls, though we have universal franchise and freedom of organization, though our democracy has developed beyond that of any previous historical period, our pupils have been left without knowledge of the fact that these are unique possessions shared only in part by other progressive nations. The lessons are accordingly filled with concrete descriptions of American institutions, and the significance of these institutions is made as clear as exposition and explanation can make it.

In the second place, the Lessons in Community and National Life aim to bring industry into the schools in a way which will appeal to the intelligence of pupils and will intellectualize all later contact with practical affairs. There is a very legitimate demand urged on the schools at this time that they prepare for industry. If the schools meet this demand only by furnishing the same kind of training in skill that industrial establishments might give, there will be little or no gain to society. If, on the other hand, the schools by ap-

propriate recognition of industry as the expression of human genius and human cooperation can give pupils ideas as well as skill to guide them in later practical life, then the schools will have made a genuine and positive contribution to industrial training. The lessons are accordingly filled with accounts of how industries originated and how they have evolved, so that the pupil may see that industry is a part of man's intellectual conquest of the world.

In the third place, the lessons are intended to create a sense of personal responsibility, which can result only when the pupil is shown how his life is interdependent with the life of other members of society. The child's first experiences with social life are those of a dependent and a consumer. There is little sense of responsibility until one begins to think of himself as obligated to consume wisely and to contribute to production. In these days when every individual in the Nation must conserve and when the responsibility for wise use of everything is a national duty, there are a unique demand and a unique opportunity to give pupils training in civic responsibility.

The method of securing these three ends is to present in the form of short sketches certain descriptions of the facts of national and community life. Each lesson is a unit intended to be read and studied by the pupil. The lesson is carefully prepared by a specialist and is filled with information which will reward the pupil for his reading. Each lesson is also part of a series in which the different lessons approach the same central theme from various angles. The lessons do not exhaust the theme which they illustrate. At the bottom of each page series of questions are set down in the hope of stimulating the pupils as well as the teachers to carry the methods of the lessons further. Especially is it hoped that the lessons will lead to studies of the local institutions which are around the school. A genuine study of community life must take up the familiar environment at the door of the schoolroom. The laboratory for these lessons is in the home environment and the industrial environment of the pupil.

It is hoped that the lessons will lead teachers and school officers to new efforts in the direction of a vital study of community life and that they will encourage publishers to bring together in available textbook form much material of a similar type.

The immediate purpose which gave rise to the lessons should also be kept in view. The Nation has need of the help of every child within its borders. The food supply of the world is running low. Our allies are in want. Our children must learn to save. It is believed that a free people can be appealed to effectively if the case is clearly laid before them. American children are not to be ordered to deprive themselves of familiar luxuries; they are to be told how urgent the need is. The lesson of civic responsibility, if learned in this rational way, will effect the saving that the Nation needs.

There are three grades of lessons, namely, section A, for the upper classes of the high school; section B, for the upper grades of the elementary school and the first class of the high school; and section C, for the intermediate grades of the elementary school. One number, or leaflet, of each section appeared each month for eight months, beginning October 1, 1917. Each leaflet contains from two to four lessons and fills 32 printed pages.

The reception accorded to the lessons by school men was most gratifying. Orders were unexpectedly heavy, and it was difficult to supply the demand. The total sales have amounted to nearly 3,500,000 copies of the 32-page leaflets.

A new edition of the lessons has been issued in which all the lessons of each of the three sections are bound together in pamphlet form. The pamphlets are sold at the flat price of 15 cents each.

The demand continues and a large sale is expected during the coming year, though naturally it will probably not reach the proportions of 1917–18.

STATISTICS.

The bureau has definitely undertaken the task of coordinating its own statistical work with that of the several State departments of education with the hope of increasing the value of both its own statistical reports and those of the chief school officers of the States and at the same time of relieving school officers of the burden of making two reports, one to the States and the other to the United States in different form. For the promotion of this work of coordination a director of statistics has been appointed who will have the assistance of a committee of State school officers appointed by the national association of State superintendents.

In accordance with the decision to collect detailed educational statistics biennially, no statistics for the school year ended June 30, 1917, were gathered. Consequently the members of the staff of the statistical division were able to assist in the preparation of statistical material needed in the preparation of reports of educational surveys and other special investigations. Among the projects on which this division was engaged were the following: Tabulating courses of study in summer schools; questionnaire on agricultural instruction in public high schools; relative enrollment in elementary and high schools in 1916 and 1917; questionnaires on enrollment in universities, colleges, and secondary schools, increase in salaries of teachers, courses of study in agricultural and mechanical colleges; material for survey of educational conditions in Tennessee; and four questionnaires on commercial education; revising educational directory; collecting and compiling statistics of all free public libraries in the United States.

Probably the largest and most important piece of work was the securing of the names and post-office addresses of individual schoolhouses in the United States and making a mailing list of such schoolhouses on addressograph plates. The list now contains about 182,000 names and should be completed at an early date. Considerable difficulty has been experienced in securing the necessary data from some of the superintendents of schools. This list is useful not only to the Bureau of Education in enabling it to reach directly teachers, school boards, and school communities, but also to many other departments and bureaus of the Government. It is especially helpful in wartime in getting messages directly to the people.

HIGHER EDUCATION.

The work of the division has been mainly in connection with the participation of higher institutions in the war. It has consisted in the personal service of the specialist in higher education as executive secretary of the committee on education of the advisory commission of the Council of National Defense, and as a member of the advisory board of the committee on education and special training of the War Department; in the preparation of circulars and multigraphed letters bearing on the effects of the war on colleges and universities; in the conduct of a voluminous correspondence; in the preparation of statistics and documents for the use of the committees of the Council of National Defense and of the War Department; and in attendance at meetings and addresses by the specialist in higher education on the educational work of the War Department, of the Council of National Defense, and on the activities of the Bureau of Education.

Seven circulars on the "Work of American Colleges and Universities During the War;" two Higher Education Letters, on "The Four-Quarter System" and on the "Canadian Soldiers' College;" Teachers' Leaflet No. 2, on "Education in Patriotism," and two secondary school circulars have been issued by the division. As executive secretary of the subcommittee of the Council of National Defense on the Relation of Engineering Schools to the National Government, the specialist in higher education prepared a report on the work of the committee. At the request of the Secretary of the Interior the division prepared and sent out an elaborate questionnaire to all engineering schools, asking for detailed information concerning their facilities for offering technical instruction. The returns were tabulated and have since been used by the committee on education and special training in the selection of institutions for the technical training of drafted men.

The specialist in higher education also served on a committee of the Society for the Promotion of Engineering Education for the furloughing of engineering students, and with councils of the National Engineering Societies in deciding recommendations to be made to the War Department regarding the treatment of engineering students.

Two bulletins have been completed and put through the press: "Statistics of State Universities and State Colleges," and "Accredited Higher Institutions." The first report of the committee on higher educational statistics, on standards and resources of colleges of liberal arts, was prepared by the specialist in higher education, as secretary of the committee, and has been transmitted for publication. Further work on the study of correspondence schools, which was begun the previous year, was carried on and Part I of the study completed.

The reports of the land-grant colleges have been audited and tabulated and are ready for the press.

The specialist in higher education has visited and inspected the facilities for technical training of 10 institutions in connection with his work on the committee on education and special training.

At the request of the Adjutant General of the Army the division passed upon the eligibility for accrediting by the United States Military Academy of 536 institutions.

RURAL EDUCATION.

The Division of Rural Education has devoted renewed efforts to amplifying the work begun the preceding year through inaugurating a ten-year general campaign for the advancement of rural schools. This object has inspired the work of the various specialists of the division in conducting educational propaganda, has guided the trend of investigations made in the division and modified the conduct of the general office routine. Several definite projects have been initiated or completed, among which, of greatest importance, are surveys of rural conditions in the States of South Dakota and Tennessee.

Surveys of Walker and Falls Counties, Texas, have been completed. In these surveys six of the specialists of this division were engaged, all of whom spent from three to six months in the field work and in compiling data and writing the reports.

Investigations are under way embracing a nation-wide study of village and small-town schools, their organization and management; a study of rural high schools in the United States, their enrollment, courses of study and teaching facilities with special reference to the junior high-school organization and its adaptation to the needs of rural communities; a special study of consolidated schools and rural high schools in the 48 States, including intensive study of 15 typical counties; an investigation of the qualifications demanded for and the methods of certification of teachers in the several States, and a study of rural teaching in Nebraska.

Work has been continued on the rural-school course of study by the specialists of the division, working in cooperation with a corps of educators representing the different sections of the country. This work is now taking a definite form in preparing subject material for the reorganization of the course of study. The background of the course resting on health and home sanitation is completed.

The campaign for the improvement of rural-school conditions was continued during the year. Besides addresses delivered before State and sectional teachers' associations and conferences throughout the country, important sectional conferences were held by specialists of the rural division at St. Paul, Minn., August 27 to September 3,

1917; at Hot Springs, Ark., November 12 to 14, 1917; Denver, Colo., November 22 to 24, 1917; at Butte, Mont., November 26 to 28, 1917; and at Chico, Cal., December 3 to 5, 1917. These were followed by a national conference on rural education and country life held at Washington, D. C., February 19 to 24, 1918.

Assistance has been rendered State school officials in formulating school legislation in several States, particularly New Mexico, Arkansas, and West Virginia. Much of the field work has been carried on without expense to the bureau.

The 1916–1918 series of the National Rural Teachers' Reading Circle was completed in September of the present year. Forty-six members from 34 different States have completed the work of the course and have received the Reading Circle Certificate issued by the Commissioner of Education, and 119 other members are due to receive this certificate before the close of the calendar year. The value of the reading circle work has been attested to by many State and county school officials throughout the country.

AGRICULTURAL EDUCATION.

Three studies have been carried to completion by this division:

1. Study of organization and administrative relationship of the colleges of agriculture.

This study was conducted mainly by the questionnaire method, but much information was obtained through the several inspectors of the States' Relations Service. From the information obtained a statement of the findings and 14 recommendations were presented to the committee on college organization and policy of the Association of American Agricultural Colleges and Experiment Stations. The recommendations were approved and incorporated into the committee's report, which was adopted by the association. These recommendations in elaborated form have been published as Higher Education Circular No. 8, 1918.

2. Investigation of the work of the land-grant colleges in the training of teachers for vocation subjects.

This inquiry consisted in sending a questionnaire to each college and a careful examination of the college catalogues, from which a statement concerning each institution was prepared. These statements formed the basis of several tabulations and summaries. The report on this investigation has been presented and published as Bulletin, 1917, No. 38.

3. Study of the organization for instruction and the requirements for admission and graduation of the several agricultural colleges.

Progress has been made in the preparation of a reading course in agriculture and country life.

VOCATIONAL EDUCATION AND HOME ECONOMICS.

Industrial education.—During the year the bureau continued its work of aiding States and communities to introduce and develop programs for education in trades and industries. These activities included the following: Outlining plans for the training of special teachers of manual training and industrial subjects, holding conferences of specialists to consider methods and practice, carrying on educational surveys and studying local industrial conditions and needs as the basis for recommendations as to vocational education programs, compiling a directory of vocational education, and publishing information concerning notable developments in the field.

The bureau has been able to render definite service in the war emergency in a number of ways. One specialist was detailed for a short period to assist the committee on education and special training of the War Department in perfecting its organization for dealing with the industrial training of soldiers, and in preparing outlines of courses of instruction for the guidance of educational institutions engaged in this work. He also assisted in holding a series of important conferences on Government policies involving the schools in war time, and the needed reorganization of instruction in science and manual training in secondary schools to meet war emergency conditions. The bureau also prepared an inventory of facilities for technical and industrial training in the schools of the country for the use of Government agencies.

Upon request of the trustees a careful study of the facilities and field of work of the Bradley Polytechnic Institute, Peoria, Ill., was made by representatives of the bureau, and plans were formulated by which that institution may render an increasing service to its community and State. The bureau has taken the initiative in organizing a committee representing the Department of the Interior, the American Federation of Labor, the United States Chamber of Commerce, and the National Association of Corporation Schools, for the purpose of making a cooperative study of the proper relation between commerce, industry, and the public schools.

The bureau has done its work to a certain extent through conferences and the distribution of reports of conclusions reached, and by means of mimeographed circulars dealing with various phases of vocational education. These publications deal with such important topics as: "Report of conference on emergency plans for vocational education;" "Continuation school organization in Reading, Pa.;" "Continuation school classes in Chicago;" "The cooperative school plan adapted to shipbuilding;" "Federal aid under the Smith-Hughes Act for the preparation of teachers of trade and industrial subjects;" "Examination and certification of industrial teachers;" "Science

and industrial arts in secondary schools in the war emergency." A representative of the bureau also cooperated with the Commission on the Reorganization of Secondary Education, of the National Education Association, in the drafting of the report of the subcommittee on industrial arts.

In January, 1918, the bureau issued a "War Service Call to Manual Training Classes," outlining a plan for the construction of game tables for the Army Young Men's Christian Association. Up to June 30, 1918, 2,523 of these tables were constructed and donated by public school pupils in 291 cities, scattered throughout all the States except 3; and the tables were distributed among 39 camps, cantonments, and naval training stations, located in 23 States.

The following bulletins published by the bureau during the fiscal year deal with phases of the problem of vocational education: Bulletin, 1917, No. 36, "Demand for vocational education in the countries at war;" Bulletin, 1917, No. 38, "Vocational teachers for secondary schools;" Bulletin, 1917, No. 46, "The public school system of San Francisco, Cal.," chapters on "Manual training," and "Vocational education."

Home economics.—During the past year the bureau has kept in touch with the home economics teachers in the elementary and secondary schools through correspondence, conferences, and personal visits. The number of high schools offering courses has shown the normal rate of increase, and there has been an extension of the teaching of home making through the lower grades. The instruction given in cooking, sewing, and household management has shown a tendency to grow into a unified course in home making. Better elementary teaching has been preparing the way for advanced high school work. Colleges and universities have been able to advance their entrance requirements and to build their courses on broader and more scientific lines. Because of the new standards established for high school work, teachers with a college preparation are demanded, so normal schools are giving their attention almost wholly to the preparation of teachers for the elementary and rural schools. The instruction in food conservation that has been given to the entire student body in some of the normal schools has been so successful that several schools report that a general course in food study is to be permanently required of all students in the normal school, men and women alike. Thus a greater number of students is given instruction relative to the place of home economics in general education and a wider interest is created in the home economics teaching in the public schools of the country.

The increased number of State and county supervisors that have been appointed is resulting in better organized work in all the schools. The majority of these appointments have come as a result of the organization of the Federal Board for Vocational Education.

In some cases the instruction is for the Smith-Hughes schools only, but in other States all home economics departments in public schools will receive this assistance. Adjustments to meet the requirements of the Federal board have been made during the year.

The educational surveys made during the year in South Dakota, Tennessee, and Columbia, S. C., have made possible an intimate study of problems in the common schools. Food and clothing conditions have necessarily effected marked changes in subject matter treated in the courses. Members of the bureau have been asked to cooperate with the Food Administration in the preparation of courses of study that have been sent to the schools. These have served to base the school work on live problems and have helped the teachers to meet the needs of the hour.

In lectures given throughout the country by members of the bureau staff the new responsibilities of home economics teachers have been emphasized. The necessity of adjusting courses in food, clothing, and household economy to meet war conditions has been presented. In conferences and through correspondence, details for new courses have been worked out.

Correlation has made possible the introduction of food study into other classes and even where a school has had no special home economics teacher some effective work has been done. New life has been given to long established courses, the work has been intensified, and the amount has been increased, and more than ever before the home economics departments have become a vital influence in the life of the communities. Instruction has not been limited to the classroom but has been carried into the homes. Special classes outside of school hours have been organized to take up the questions of food study and conservation. Both teachers and students have given lectures and demonstrations, planned exhibits, and written articles for publication.

Conferences of home economics teachers called in New York City and Chicago by the Commissioner of Education have offered opportunity for concerted action in the teaching of food and clothing conservation. The increased extension work carried on by the Department of Agriculture has also served to stimulate home economics courses. The State colleges have been especially active in this service.

The series of mimeographed home economics letters that are published by the bureau from time to time has been supplemented by printed home economics circulars designed to be permanent in form. The character of these circulars is suggested by their titles given below:

Home Economics Circular No. 1. Teaching home economics under present economic conditions.

Home Economics Circular No. 2. Current problems in home economics.

Home Economics Circular No. 3. Home economics in small high schools.
Home Economics Circular No. 4. Principles and policies in home economics education.
Home Economics Circular No. 5. Government publications of interest to home economics teachers and students.
Home Economics Circular No. 6. A course in food economies for the housekeeper.

In addition to these circulars a bulletin has been published for the use of home economics teachers who are cooperating with the home and school garden work. (Bull., 1917, No. 47. The Preparation and Preservation of Vegetables.) A chapter entitled "Home Economics Education" was included in Bulletin No. 46, the Public School System of San Francisco, Cal.

UNITED STATES SCHOOL GARDEN ARMY.

In 1914 this bureau began the promotion of home gardening under school direction in the cities and towns of the United States with a view to furnishing profitable and educative employment to school children during out of school hours and during the vacation periods. Owing to the small amounts of funds available for this work, it was necessary to limit it to a comparatively small section of the country. For the past three years two persons have been employed in this work by the bureau, and while approximately 100 cities in all parts of the country were constantly receiving help from them, most of their time has been given to intensive work in the cities of a few of the Southern States, namely, Virginia, North Carolina, South Carolina, Georgia, and Tennessee. In some of the cities of these States the work has been placed on a firm basis, and the results achieved are most encouraging. Large quantities of food products were raised by the school children in their home gardens, back and side yards, and vacant lots.

According to reports received at the bureau 488 cities throughout the United States had school-directed home gardens in 1917, with a total enrollment of 355,715 children, and the total cash value of vegetables raised by the children in 215 of the cities was $1,810,729.33. The total cost of home gardening, including salaries, in those 215 cities was $143,842.88, leaving a net profit of $1,666,886.45.

The war has brought home to our people the urgent necessity for increased food production and for the conservation of man power and transportation facilities. The success of home gardening under school direction already achieved was convincing proof that a general adoption of the plan in all cities and towns of the country would materially assist the food problem. With this end in view the President of the United States in February, 1918, allotted to the Department of the Interior for use by this bureau the sum of $50,000 from the appropriation for the National Security and Defense, to be used in

the promotion of home gardening under school direction during the following six months.

On February 25, 1918, the President wrote the following letter to Secretary Lane:

25 FEBRUARY, 1918.

MY DEAR MR. SECRETARY: I sincerely hope that you may be successful through the Bureau of Education in arousing the interest of teachers and children in the schools of the United States in the cultivation of home gardens. Every boy and girl who really sees what the home garden may mean will, I am sure, enter into the purpose with high spirits, because I am sure they would all like to feel that they are in fact fighting in France by joining the home garden army. They know that America has undertaken to send meat and flour and wheat and other foods for the support of the soldiers who are doing the fighting, for the men and women who are making the munitions, and for the boys and girls of western Europe, and that we must also feed ourselves while we are carrying on this war. The movement to establish gardens, therefore, and to have the children work in them is just as real and patriotic an effort as the building of ships or the firing of cannon. I hope that this spring every school will have a regiment in the Volunteer War Garden Army.

Cordially and sincerely, yours,

WOODROW WILSON.

HON. FRANKLIN K. LANE,
Secretary of the Interior.

Two main purposes prompted the planning of the United States School Garden Army: (*a*) Increased food production and (*b*) training of school children in thrift, industry, service, patriotism, and responsibility.

The necessity for man power was felt. This was especially true in agricultural pursuits. Not alone were the drafted young men going from the farm, but great numbers of farm employees were being attracted to the cities by higher wages offered in other industries. If the millions of city boys and girls could be induced to give their leisure time to cultivating the thousands of acres of untilled land in front and back yards and vacant lots of our cities, towns, and villages, it would result in a substantial increase in food production and an improvement in the quality of our coming citizenship.

The Bureau of Education undertook to accomplish this through the organization of the United States School Garden Army. The field has not been seriously entered by any other organization. It is an educational problem and can be solved with economy and efficiency only by the schools.

The plan of organization involved (*a*) a general director, who is responsible for organization, propaganda, and administration; (*b*) regional directors who are charged with the responsibility of writing instructions upon gardening that will enable supervisors and teachers to take a garden company successfully through a season, even though not expert gardeners. These instructions have been put out in leaflet form and sent from the central office to all who

applied for them. In a general way each regional director is considered responsible for the work in his territory.

The army plan of organization was adopted and has proved to be very popular and efficient. Simplicity of organization was desired, however, and but few of the divisions of the army were paralleled in the garden army plan.

A company consists of 150 garden soldiers as a maximum number. This number should be, and usually is, much smaller. Each company is entitled to a captain and first and second lieutenant. A garden teacher is required for the company. The officers have been used to great advantage by many teachers in helping them on their reports, inspecting gardens, encouraging members of their company to do their full duty as true soldiers, and in arranging for exhibits, pageants, plays, etc.

To become an enlisted soldier in this army a pupil needs only to sign the enlistment sheet, which pledges him to do something that will help increase food production. No definite amount is specified, but each is expected to do his part in helping fight the battles of democracy and freedom.

A bronze bar with the letters, "U. S. S. G.," upon it is given to each enlisted soldier. This is his badge of recognition by the Government at Washington. The badge of the captain has three small stars in the border, that of first lieutenant, two, and of the second lieutenant, one. These little bars have greatly stimulated the interest children have taken in the work.

As this is fundamentally a school problem, the work should be provided for by superintendents and boards of education and financed by them from school funds. Not only is this as legitimate and as necessary for a well-organized and administered school system as the teaching of any other branch, but to care for it at this time has become a patriotic duty. To lead boards of education to see it thus was the most important problem to be met. Success attained was very gratifying and promises for next year encouraging. Some cities have done remarkable garden work this season, and most cities are coming to see that the schools must assume full control of and responsibility for it to insure its full success and permanency.

Teachers prepared to teach gardening were difficult to find. Normal schools and colleges, with few exceptions, had not offered the work to those preparing to teach. It was necessary, therefore, to encourage the forming of special classes in gardening and to outline courses for them to pursue. Interest, however, was keen, and the promise for next year is much better.

Through the generosity of Mr. Julius Rosenwald, of Chicago, who offered to provide one-half the salaries paid negro garden teachers in Southern States a considerable number of southern

cities were enabled to provide good supervision for the work of the colored children.

Rather than enrich and adjust the work of our schools, we close them during the summer months. This makes supervision of garden work in summer difficult, and without supervision it will fail. The spirit of work to win the war has been strong, however, and probably by the time we have finished the war we shall have learned that school work, as other work, is as profitable in summer as in winter.

One million five hundred thousand boys and girls have responded to the call of the President and enlisted in the United States School Garden Army.

Twenty thousand acres of unproductive home and vacant lots have been converted into productive land. This will release an equal acreage now used in truck gardening for the production of other foodstuffs more important for war purposes. It will also relieve transportation congestion through home consumption of home produced foodstuffs.

Fifty thousand teachers have received valuable instruction in gardening through the garden leaflets written by experts in this office and distributed from here. One million five hundred thousand leaflets have been sent out.

Boards of education and other civic organizations have been influenced to give financial and moral support to the school and home garden movement and to pay extra salaries for supervision and teaching.

Hundreds of thousands of parents have become interested in the garden movement and are working with their children in home gardens. In Salt Lake City alone 5,200 mothers, representing 62 parental associations, are actively supporting food production through the schools.

Thousands of civic, commercial, and patriotic organizations have become interested in the movement and are giving it hearty support.

One and one-half million children have been given something to do this summer, something that will help carry the burden of their country in this struggle for freedom, something that will help them to build character and something that will appeal to and develop their patriotism.

Home and vacant lot gardening in cities, towns, and villages has been dignified and made popular to a degree that practically insures it a prominent place in the school system of our country. It would be difficult to estimate the educational and material value of such results. No other movement in history promises so much in aiding the "Back to the soil" movement as this.

The work accomplished during the first few months has been so successful that the President has allotted the sum of $200,000 for

the continuation of this work through the fiscal year ending June 30, 1919. Plans have been made whereby a much larger force of trained supervisors will be employed in the several regions into which the United States has been divided.

AMERICANIZATION.

The principal work of the division of immigrant education has been to place Americanization before the country as a measure related to the war. The first step was to secure through the National Committee of One Hundred, an advisory council on Americanization to the Bureau of Education appointed by the Commissioner of Education on September 1, 1916, a resolution from the Council of National Defense indorsing the Federal program of Americanization as being worked out by the bureau. This was done December 13, 1917. On February 12, 1918, the Council of National Defense joined with the bureau in putting forth a national plan of Americanization.

This plan requested all State councils of defense to engage in Americanization work and to appoint Americanization committees and State directors of Americanization. Under this plan about 30 States were organized during the remainder of the fiscal year.

Under the joint plan the work of State and local agencies is being correlated and coordinated under the Americanization committees of State and local councils of defense. The object is to avoid duplication of work and to effect the greatest unity of action possible. Every State council of defense and a large number of local and community councils have been supplied with the national plan and with all the special schedules of operation and circulars of information published by the bureau.

To assist in placing Americanization before the country as a war measure, the Secretary of the Interior called a conference on April 3 of all the governors, chairmen of State defense councils, and presidents of industrial corporations and chambers of commerce. About 300 persons attended this conference. Resolutions were adopted calling upon Congress to appropriate adequate funds to the respective Federal departments doing Americanization work, indorsing the principle of Federal aid in Americanization to States and communities, urging industrial and commercial organizations to cooperate with Federal and State authorities in a Nation-wide plan, and recommending that all elementary instruction in all schools be conducted in the English language.

The clearing-house service has been considerably extended during the year. The variety of publications distributed covers a greater range. Over 100,000 circulars, news letters, schedules of operation, and schedules of standards and methods were sent out. Over 100,000

individual enrollment blanks were disseminated for the signature of individuals who desire to enroll in the Americanization campaign. About 25,000 bulletins, pamphlets, and other printed material were distributed, together with a large quantity of "America First" and flag posters.

The National Committee of One Hundred has expanded its representation to include a greater number of industrial men and foreign leaders. Its principal activity during the past year has been the formulation of two bills, one working out the principle of Federal aid to the States for Americanization work and the other calling for funds to carry out the war Americanization plan. The legislative committee also was instrumental in drafting and securing the passage of three bills in New York State providing for compulsory attendance of non-English-speaking persons between 16 and 21 years of age and providing for compulsory maintenance of educational facilities for their instruction and also for the training of teachers. A model bill for compulsory attendance has been drafted and furnished to several State school authorities and legislatures. The committee now has headquarters in New York City.

Special effort has been placed on the coordination and correlation of the varied activities of unofficial agencies, such as patriotic organizations, women's clubs, civic associations, fraternal orders, councils of defense and Americanization committees. Special cooperative plans have been worked out with the American Bankers' Association, Scottish Rites, Pennsylvania State Department of Labor and Industry, National Committee of Patriotic Societies, Philadelphia Chamber of Commerce, and a great many other local chambers, with a large number of industrial corporations, with the New York State Department of Education and local superintendents of schools, and with about 25 patriotic societies and civic associations. The activities of many of these have been correlated with the national plan of Americanization as put out through the Council of National Defense.

Other activities include the preparation of over 15 new circulars of information and schedules of operation for official and unofficial agencies, and research into the educational activities of industrial corporations and chambers of commerce.

On May 2, 1918, the Secretary of the Interior accepted a proposition from the National Americanization Committee of New York for the extension of the bureau's work in Americanization with a special view to promoting the work of education among the foreign-born population of the United States in order to give them a knowledge of the industrial requirements in this country, of the history and resources of the country, of our manners and customs, and of our social, civic, economic, and political ideals, and through cooperation with loyal leaders of racial groups to win the full loyalty of these

people for the United States and their hearty cooperation in the war for freedom and democracy. Under the plan of cooperation adopted the National Americanization Committee bears the additional expense for salaries and travel of specialists, assistants, clerks, and other employees, as well as the necessary expenses for office equipment. All employees are selected by the Commissioner of Education and appointed by the Secretary of the Interior. Some of the immediate objects of this new work are the following:

1. To give the immigrant better opportunities and facilities to learn of America and to understand his duties to America.

2. To unite in service for America the different factions among the several racial groups and to minimize in each race the antagonism due to old-country conditions.

3. To cement the friendships and discourage the enmities existing among races and to bring them together for America.

4. To bring native and foreign-born Americans together in more intimate and friendly relations.

5. To give native-born Americans a better understanding of foreign-born Americans.

6. To develop among employers a more kindly and patriotic feeling toward foreign-born workmen.

7. To encourage the foreign-born Americans to assist in the work of Americanization and to develop a more patriotic feeling toward the work in which they are engaged.

8. To develop the school as the center for Americanization work for all alike.

The division of immigrant education has been enlarged by the addition of a war work extension service section with offices both in Washington and New York City. A semimonthly publication is planned under the title of "Americanization Bulletin."

COMMUNITY ORGANIZATION.

The conduct of the war has led to the discovery, on the part of many governmental agencies and the Nation as a whole, that the spiritual and material resources of the people can be mobilized effectively only when the people act in community units. This discovery has given a marked impetus to the community organization movement and presented an open door of opportunity to this division of the bureau's work, which it has entered, so far as its limited working force permitted.

The devision is operated by two men, one of whom is engaged chiefly in research work, and the other chiefly in field work.

At the request of the Council of National Defense, the community organization division cooperated in a national campaign to stimulate the organization of local communities as a means of national defense.

This involved work covering a period of six months. A 52-page bulletin (No. 11, 1918: "A community center, what it is and how to organize it") was prepared and distributed by the bureau to State and county superintendents, and distributed by the Council of Defense to State and county councils.

A national conference on community organization was arranged and conducted by the bureau in cooperation with State councils of defense, State superintendents of public instruction, the National Education Association, and the National Community Center Association.

A permanent endowment fund of $25,000 was secured and a board of trustees incorporated to administer it. The proceeds are used to help the work of community organization in cooperation with the Bureau of Education. It has established two lectureships on community organization, one at Cornell University, the other at the University of North Carolina. The bureau's field agent has been requested to give the first series of these two courses of lectures.

During the year the field agent has delivered courses of from 3 to 12 lectures at Pennsylvania State College, Georgia Normal and Industrial College, and the Normal and Industrial Institute, Asheville, N. C. He has delivered 25 single lectures at city and State conventions, and 14 addresses in the City of Washington at the request of its board of education. He has assisted in the organization of community activities in Boston and New York.

Through the efforts of the specialist in research work, a post-office station was established in a schoolhouse in Washington, D. C., with the approval and cordial support of the school board and the Post Office Department. The community secretary was made postmaster. This is a pioneer piece of work, the possible value of which is very great not only in decreasing needless expenditure of money, but in increasing the community use of the schoolhouse.

With the assistance of this division, eight districts in Washington, D. C., have been permanently organized as community centers, with regularly employed community secretaries supported at public expense.

The community activities now conducted in many parts of the country are large in number and varied in character. Data concerning them ought to be gathered and distributed so that communities may help each other by pooling their experience. The bureau at present is not manned or equipped to render this needed service.

The entire country appears to be profoundly conscious of the importance of community organization, not only to meet the Nation's present needs, but also the equally important needs of the reconstruction days immediately ahead. The need is great. The people are willing to meet it. They are looking to the Bureau of Educa-

tion for suggestion and guidance. The country is now requesting of this division a service many times larger than it is equipped to render. The Nation's awakened need and desire for help in community organization is a ground of hope for our common welfare and for the success of our experiment in democracy.

SCHOOL HYGIENE AND PHYSICAL EDUCATION.

Since February of the present year the bureau has had the full time service of one specialist in educational hygiene. Prior to that time in the current year, and for a series of years in the past, it had had part time service of two men. Of these, one has devoted his time exclusively to assisting school authorities in the preparation of plans for school buildings; the other, to reviewing progress in educational hygiene and answering the more important of the numerous inquiries that came to the bureau upon the varied phases of this diversified subject. The volume and variety of such inquiries and the volume and variety of activities in the field of educational hygiene have increased enormously since the entrance of the country into the war. How great and diversified is the task of keeping up with the inquiries alone is shown by the following partial list of topics upon which information and advice was given by this division in one month of the present year: Physical education in elementary, secondary, and normal schools, and in the colleges; plans for health supervision of schools in rural communities, small towns, and cities; physical examination of children for working papers; administration of medical inspection; school clinics; malnutrition of school children; State laws for physical education; State laws for medical inspection; plans for school buildings; ventilation of school buildings; cleaning of school buildings; training of janitors in school sanitation; educational procedure for improvement of speech defects; methods for backward and defective children.

All possible effort has been made to cooperate effectively with governmental agencies and with voluntary organizations in the promotion of investigations, in the organization of health instruction and physical education in the schools, and in the work of arousing and directing public interest in physical upbuilding as a fundamental educational object.

The specialist in school hygiene and sanitation cooperated with the committee on venereal diseases of the medical section of the Council of National Defense in the preparation of a pamphlet entitled "Keeping Fit," for high-school boys, which was issued under the joint auspices of the Council of National Defense and this bureau. The pamphlet includes information in regard to the principal causes for rejection of drafted men and a clear statement of sex hygiene

and sex morality. He has prepared a plan for a thoroughgoing program of physical education in the high school and an analytical summary of State laws for physical education. He also prepared a schematic plan for physical education in colleges as an integral part of the military training program for the use of the advisory board of the Committee on Education and Special Training of the War Department. This covered plan of examination, classification for training and treatment, time factor, classification and graduation of physical training exercises. With the cooperation of a committee of the American Public Health Association, an investigation of "School closing as a means of combating epidemics" has been begun.

The services of the special agent in school-house construction and sanitation are frequently sought by school boards to assist them in planning school buildings. For this purpose he visited during the year the cities of Memphis, Tenn., Montgomery, Ala., Richmond, Ky., and Little Rock, Ark. In other cases advice was given through correspondence.

A conference on physical education was held at Atlantic City, N. J., under the auspices of the bureau on February 26, 1918, which resulted in the adoption of a program calling for Federal legislation for the promotion of physical education.

COMMERCIAL EDUCATION.

With the cooperation of the Association of Urban Universities, the Bureau of Foreign and Domestic Commerce, and local committees in the selected cities, arrangements have been made for an investigation as to the need for trained service in the conduct of foreign trade and to determine how the schools and colleges can best meet that need. This investigation will cover the cities of Boston, New York, Philadelphia, Baltimore, Rochester, Pittsburgh, Cleveland, Akron, Cincinnati, New Orleans, St. Louis, Chicago, Seattle, Portland, and San Francisco. Plans are now being made to carry on a similar investigation of all cities in the United States having more than 25,000 inhabitants.

There were prepared and distributed courses of study in commercial education for use in elementary schools, high schools, colleges, universities, and private business schools.

SCHOOL ADMINISTRATION.

The principal work accomplished in the field of general school administration, aside from surveys, consisted of a bulletin on summer sessions in city schools, a digest of State laws relating to libraries, and a digest of educational legislation enacted in 1916 and 1917. The history of education in Arizona was completed and issued as Bulletin,

1918, No. 17. Projects under way include a bulletin on reading, the preparation of a course of study for the first grade, an investigation of the causes which lead to failures and nonpromotion in the first grade, and an investigation of the extent of the use of activities in the primary school.

SURVEYS.

Thirteen different surveys of educational systems and institutions were carried on by members of the bureau during the year. Of this number eight were begun during preceding years.

The final report of the survey of the public schools of Webster Groves, Mo., was completed during the year and submitted to the Commissioner of Education. This survey was made by the chief of the division of school administration, assisted by Dr. W. W. Charters, of the University of Wisconsin, and Mr. Henry J. Gerling, of St. Louis, Mo.

The final report of the survey of the public school system of San Francisco, Cal., was issued as Bulletin, 1917, No. 46.

Work on the educational survey of the State of Delaware, with special reference to industrial education in the city of Wilmington, was continued by the specialist in industrial education.

The survey of the rural schools of Walker and Falls Counties, Tex., was completed and a final report thereon was made.

The report of the survey of the public school system of Elyria, Ohio, was completed during the year and will be issued as Bulletin, 1918, No. 15.

Work was continued on the educational survey of the State of Tennessee, and the field work has been completed. This survey was made by the specialist in rural school administration, two specialists in rural education, and one of the specialists in home economics. The report has been completed, but not yet published.

The report of the survey of the Bradley Polytechnic Institute, Peoria, Ill., requested by the administration of that institution, was completed by the specialist in higher education and the specialist in industrial education.

The final report of the survey of the educational system of the State of Arizona, excepting the report on the State university, was completed and issued as Bulletin, 1917, No. 44. A preliminary report on the survey of the State university has been submitted to the officers of that institution.

Because of lack of clerical help and labor-saving devices in the statistical division, the bureau has been unable to complete the report of the educational survey of the mountain counties of the Southern States, the collecting of material for which was completed more than a year ago. It is hoped that this report may be ready within the next few months.

In accordance with the provisions of an act of the Legislature of South Dakota, this bureau has made a survey of the entire educational system of that State, including all schools and educational institutions supported by public funds. The survey was made under the direction of the specialist in rural school practice, assisted by the specialist in higher education, the specialist in agricultural education, specialist in home economics, assistant in rural education, and by Dr. William F. Russell, dean of the school of education of the University of Iowa, Dr. Henry B. Wilson, superintendent of schools of Topeka, Kans., and Dr. Alexander J. Inglis, professor of secondary education in Harvard University. The preliminary report of the survey was transmitted to the survey commission of the State on June 14, 1918, and the recommendations made therein were accepted by the survey commission. The final report is now in press.

At the request of the board of education of the city of Columbia, S. C., this bureau undertook a survey of the school system of that city. The survey was made under the immediate direction of the specialist in city school systems, assisted by the chief clerk of the bureau, one of the specialists in home economics, specialist in school and home gardening, and Dr. Carleton B. Gibson, superintendent of city schools, Savannah, Ga. The preliminary report of the survey has been submitted to the board of education of Columbia, and the final report is now in press.

With the cooperation of the Department of Labor this bureau has made a study of industrial conditions in the city of Richmond, Va., with a view to the establishment of cooperative half-time classes for young people of high-school age. The work on the part of the bureau was done by the specialist in industrial education and the specialist in city school systems.

The specialist in rural school practice was granted leave of absence without pay for the purpose of making for the provincial government of the Province of Saskatchewan, Canada, a survey of education in that Province. The report has been completed and issued as a public document by the government of the Province.

At the request of the National Association of Accredited Commercial Schools, a survey was made of the member schools of that association located in the cities of Pittsburgh, Pa., Jamestown, N. Y., Rochester, N. Y., Trenton, N. J., Philadelphia, Pa., and Wilmington, Del. The survey was made by the specialist in commercial education of this bureau.

NEGRO EDUCATION.

Assistance has been given to the War Department in the selection of the training schools for the drafted negro men. Both the War Department and the Department of Labor have requested and re-

ceived special information as to persons fitted for responsible positions. Other war agencies that have been aided are the American Red Cross, the Young Men's Christian Association, the War Camp Community Service, the General War Time Commission of the Churches, the Committee on Public Information, the War Work Council of the National Board of Young Women's Christian Association, and the general committee on Army and Navy chaplains of the Federal Council of Churches. Probably the most valuable service this division has rendered in connection with the war has been the investigation of conditions among the negro troops in and about the various cantonments. There is now available definite information as to the needs of the negro soldiers both in the camps and in the communities near the camps. The facts thus assembled are now used by practically every agency working for the soldiers.

Other work during the year for negro education may be summarized as follows: Development of cooperation between public and private agencies; cooperation of State, county, and city officials, north and south, in all movements to promote the education of the negro; furnishing information on the educational phases of the race problem; influencing northern donors to give money only to worthy schools; exposing fraudulent negro schools; bringing to the attention of the public the inadequate provision made for negro education; assisting the negro schools in the matter of curriculum, accounts, and buildings. One member of the division who is trained in accounting and business management gives all his time to the improvement of accounts and records in the schools. The systematic help planned for the schools will not only effect important economies, but also greatly increase and improve the educational efforts of these schools.

In August, 1917, an important conference on negro education was held in the auditorium of the Interior Department building in Washington. In accordance with resolutions adopted by the conference the Commissioner of Education appointed a committee on negro education, consisting of representatives of church boards of various denominations that maintain schools for negroes, the public school systems of the Southern States, the independent schools not connected with any church board and unaided by the State, the State agricultural and mechanical colleges for negroes, and the educational funds for negro education. One meeting of the committee and three meetings of subcommittees have been held. These subcommittees have prepared reports on educational standards, financial aid, and cooperation of private agencies. Other subcommittees are considering questions of increased support for the public schools and the cooperation of public and private agencies.

ALASKA.

During the year the field force of the Bureau of Education in Alaska consisted of 5 superintendents, 1 assistant superintendent, 116 teachers, 9 physicians, and 11 nurses; 69 schools were maintained, with an enrollment of 3,700.

School buildings were erected at White Mountain, whither the Eskimos had migrated from Council; at Elim, within a tract on Norton Sound which had been reserved by Executive Order for the use of the Eskimos formerly inhabiting the village of Golovin; at Fort Yukon, to replace the school building which the erosion of the river bank had rendered unsafe; and at Tyonek, where the small log building hitherto used for school purposes had proved inadequate. At Metlakatla a residence was erected for occupancy by the principal teacher.

The wisdom of the policy of setting aside selected tracts within which the natives can readily obtain fish and game and advantageously conduct their own enterprises has again been demonstrated by the success of the colony at Noorvik, in Arctic Alaska. With their advancement in civilization, the Eskimos living at Deering, on the bleak seacoast, craved a new home. Lack of timber compelled them to live in the semiunderground hovels of their ancestors, while the killing off of the game animals made it increasingly difficult for them to obtain food. An uninhabited tract on the bank of the Kobuk River, 15 miles square, abounding in game, fish, and timber, was reserved by Executive Order for these Eskimos, and thither they migrated with their household goods and herds of reindeer. On this tract in the Arctic wilderness the colonists, under the leadership of teachers, have built a village with well-laid-out streets, neat single-family houses, gardens, a mercantile company, a saw mill, an electric-light plant, and a wireless telegraph station which keeps them in touch with the outside world.

Affairs at Metlakatla, on Annette Island, have made satisfactory progress. The legality of the Annette Island fishery reserve having been reaffirmed by the circuit court of appeals, definite plans for the development of the colony have been carried into effect. By a lease dated April 30, 1917, the Secretary of the Interior, on behalf of the Metlakatlans, granted to the Annette Island Packing Co., of Seattle, fish-trapping privileges within the reserved waters adjacent to Annette Island and permission to erect and operate a cannery on Annette Island. For these privileges the lessee guaranteed the payment of not less than $4,000 during the season of 1917 and of not less than $6,000 per annum for five years beginning with 1918. It is expected that the revenues accruing from this lease will enable the Secretary

of the Interior to take over, for the Metlakatlans, the property of the lessee within the reserve and to arrange for the operation of the cannery by the natives themselves.

During the summer of 1917 the Annette Island Packing Co. expended $7,657.14 in the construction of cannery buildings; the royalties amounted to $4,801.95, leaving a balance of $2,855.19 to the credit of the company at the close of the season.

In May, 1916, representatives of the Bureau of Education succeeded in organizing among the natives the Metlakatla Commercial Co., with a capital of $2,255 and 30 shareholders, to conduct the mercantile business of the settlement. The auditing of the affairs of the company in January, 1918, showed a capital of $14,985 at that date and a net profit of $4,033.30 for the year. The number of stockholders had increased to 110. In addition, the company had rehabilitated and operated the sawmill and had furnished lumber for the cannery buildings and for other buildings in the village.

The income and wages resulting from the cannery lease, guaranteed through five successive years, and the prosperity of its commercial company assure the economic restoration of the Metlakatla colony.

Economic conditions among the natives of Alaska have been greatly affected by the war. While the prices received by the natives for their furs have fallen below normal, the cost of food, clothing, and manufactured articles imported from the States has increased as much as 300 per cent. The Bureau of Education has, therefore, through the agency of its teachers, urged the natives to live, as much as possible, independently of imported articles and to depend upon native products, not only for their own benefit, but also for the assistance they can thereby render to the country in conserving its food supply. New impetus has been given to the endeavor of the Bureau of Education to train the natives in the raising of vegetables for their own use and for sale. Efforts in this direction have produced encouraging results, especially in the upper Yukon, Kuskokwim, and Kotzebue Sound regions.

In widely separated parts of Alaska the natives have shown their gratitude to the Government, which has done so much for them, by zealously cooperating in activities which will help to win the war; they have willingly complied with the requests of the Territorial food administrator, liberally purchased Liberty bonds and war savings stamps, organized branches of the Red Cross, formed knitting and sewing societies in many villages, and contributed toward the support of the "Alaska bed" in one of the American hospitals in France.

Congress appropriated $62,500 for the support of the medical work of the bureau among the natives of Alaska during the fiscal year

1917–18. Nine physicians and eleven nurses were employed; hospitals were in operation at Juneau, Nulato, and Kanakanak; as heretofore, medical supplies were sent to teachers remote from a hospital, physician, or nurse, for use in relieving minor ailments.

During the year the building at Kanakanak, erected as a school building in 1909, was enlarged and remodeled for hospital purposes; the hospital building at Akiak, begun in 1917, was completed.

At the Juneau hospital the policy was inaugurated of receiving native girls for theoretical and practical training as nurses. This action will result in the training of a considerable number of girls who will render effective service in improving the health and in raising the standard of living in the native villages to which they return.

As the natives of Alaska advance in wealth and independence, it is natural that they should wish to assume part of the expense of their medical service. The honor of taking the first step in this direction belongs to the natives of Hoonah, who during the latter part of the year paid the salary of a physician and started a fund for the erection of a hospital in their village.

Pending the time when the congressional appropriations will permit the bureau to assume the entire expense of the medical care of the natives in southeast Alaska, the Commissioner of Education entered into an agreement with the woman's board of home missions of the Presbyterian Church, by which the board assumed the entire responsibility for the medical work in the villages of Klawock and Hydaburg and agreed to rent to the bureau its hospital building at Haines for use as a tuberculosis sanitarium, the board also assisting in the maintenance of the sanitarium during the first year.

The reports from the reindeer stations for the fiscal year ended June 30, 1917, the latest complete information received, show a total of 98,582 reindeer distributed among 98 herds. Of the 98,582 reindeer, 67,448, or 69 per cent, were owned by 1,568 natives; 3,046, or 3 per cent, were owned by the United States; 4,645 or 5 per cent, were owned by missions; and 23,443, or 23 per cent, were owned by Lapps and other whites. The total income of the natives from the reindeer industry during the fiscal year was $97,515. The total number of reindeer, 98,582, is a net increase of 20 per cent during the year, notwithstanding the fact that 13,144 reindeer were killed for meat and skins or were lost.

Reindeer fairs or conventions were held during the winter at Igloo, on Seward Peninsula; at Unalakleet, in the Norton Sound region; at Noatak, in the Kotzebue Sound district, and at Noorvik, on the Kobuk River. These annual fairs have become a recognized feature of the reindeer industry; they bring together Eskimos from a large extent of country who spend a week together thinking about

and discussing not only subjects relating to the reindeer industry, but also matters of importance affecting the Eskimos as a race. The competitions and exhibits promote interest in the various phases of the work; comparison of methods results in increased efficiency; personal intercourse makes for good fellowship and develops leaders who are recognized as such by the Eskimos themselves. An important result of the fairs was the organizing in northwestern Alaska of the Eskimo Reindeer Men's Association, the object of which is to awaken the natives to their own responsibilities and to secure united sentiment and action in important matters affecting the Eskimo race.

KINDERGARTEN EDUCATION.

An appropriation recently granted by Congress for the investigation of kindergarten education enables the Bureau of Education to look forward to extending its usefulness in this part of its educational service.

During the past year a series of articles on training little children in the home has been widely distributed through the medium of over 2,000 newspapers and magazines whose aggregate circulation amounts to 33,000,000. Individual copies also of the articles have been sent on request to 15,000 mothers living in isolated districts, 1,000 presidents of women's clubs, and 1,500 home demonstration agents. The practical value of these articles is intensified by reason of their authorship; they were prepared by mothers who were formerly kindergarten teachers.

A timely circular sent to 10,000 kindergartners contained excellent suggestions concerning the social guardianship of young children during the war. That responsibilities in this matter have been shouldered is evidenced by the number of kindergarten teachers who have participated in activities connected with the weighing and measuring of babies; the maintaining of fresh-air funds, of nurses for congested city districts, and of ice and milk stations; supervising summer kindergartens, playgrounds, and war gardens; organizing neighborhood circles in cooperation with agencies for Americanization and holding doorstep meetings for mothers of foreign districts.

More and better kindergartens in the United States as one means of protecting the "second line of defense," the children, has been quite generally recognized. Campaigns for extension have been planned in Texas, Ohio, Pennsylvania, and other States where laws favorable to the establishment of public kindergartens are in operation. Several new kindergarten training schools have been organized in various parts of the country.

A significant event of the year has been the organization of a unit of American kindergartners to go to the devastated regions of France. Kindergartners are peculiarly fitted to assist in the task of

human reclamation, and the International Kindergarten Union has raised funds to support a group of teachers in France. Miss Fanniebelle Curtis, supervisor of kindergartens in New York City, is director of the work.

In response to a recognized need, a presentation of the minimum essentials of a kindergarten curriculum has been prepared for publication. A study of the status of kindergarten supervision (Bulletin, 1918, No. 38) has made apparent the fact that many kindergarten teachers are working entirely without the aid of a supervisor. To meet the needs of such teachers, as well as to show the continuity of education from kindergarten through the grades, the kindergarten curriculum has been presented in terms and terminology of present-day school practice. Other studies in progress relate to the laws and practices in the several States concerning the certification of kindergarten teachers.

The reading course for kindergarten teachers announced by the Bureau of Education is arranged under these headings: Educational classics, appreciation of child life, principles and methods of education, kindergarten education, sociological aspects of education, appreciation of nature and hygiene, religious and moral education. In all 31 books are recommended and the reading of 15 is required.

HOME EDUCATION.

Education in the home and the cooperation of the family group with other social organizations outside the home, especially the school, during the past year have been stimulated by the encouragement given by Federal, State, and local agencies.

Organization of parent-teacher associations, which has been urged by the Bureau of Education since 1913, has increased in every State. Through the cooperation of the National Council of Defense woman's committee the bureau has made a list of over 8,000 organizations. Two States, Michigan and Kentucky, have effected State organizations during the past year.

The National Congress of Mothers and Parent-Teacher Associations has for five years cooperated with the Bureau of Education in the Department of the Interior in promoting home education. Through this arrangement more than a half million homes have been reached with some kind of educational material to assist mothers in the care and training of their little children before they are of school age, to help them to further their own education, and to help the boys and girls who have left school but are still living at home to further their education.

The cooperation of 75,000 women in rural districts made it possible to reach mothers of children under 3 years of age in 2,100 counties with literature on the care and training of little children.

The demand for selected courses of reading necessitated the formation of the National Reading Circle, which has a membership of about 8,000 readers. Ten courses have been prepared, with the cooperation of specialists in the various subjects. Reading circles have been formed; among them the Glendale (Cal.) circle has continued for about three years and has a total attendance of 150 mothers. Two new courses have been issued during the year, "Thirty World Heroes" and "Thirty American Heroes."

Cooperation of State libraries has been given by 31 States. These States will see that readers who can not get the books otherwise are provided with them upon application. Several local libraries have presented plans for active cooperation in carrying on the reading circle.

The Bureau of Education has issued 55 press letters on the Training of Little Children, which are very useful to mothers in home training.

Other Federal departments which have contributed publications for home education are: Labor, Treasury, Agriculture, and Commerce.

State aid to home education has been furnished during the past year by California, Connecticut, Idaho, Illinois, Iowa, Kansas, Maine, Massachusetts, Mississippi, Montana, Nebraska, New Jersey, New York, North Carolina, South Dakota, Oregon, Utah, Washington, and Wisconsin.

CIVIC EDUCATION.

The work of the bureau in the department of civic education is not confined to any one division. One of its important aspects, for example, is in the care of the division of immigrant education which is concerned with the preparation of our immigrant population for American citizenship.

The division of community organization has another important phase of the work in charge. It "is endeavoring to stimulate an interest in civic organization for the adults of the community, with especial reference to community use of public schoolhouses." Its especial interest, in other words, is in the organization of communities both for public discussion and for community action, the latter often being more educative than the former from a civic standpoint.

There are other divisions of the bureau whose work has direct civic-educational value. Such, for example, is the division of home and school gardening, which this year has conducted a widespread war gardening campaign. Among the many values of this work not the least is the training it affords in habits of good citizenship.

During the past year the bureau has prepared, or has cooperated with other agencies in preparing, a number of pamphlets and leaflets

relating to, or growing out of, the war situation. One of the earliest of these was a leaflet on "Opportunities for history teachers; the lessons of the great war in the classroom," prepared by the National Board for Historical Service and published by the bureau. The most conspicuous publication of this sort is the series of "community leaflets" containing an extended series of "Lessons in community and national life." These leaflets were issued by the bureau in cooperation with the Food Administration and under the editorship of Profs. Charles H. Judd and Leon C. Marshall, of the University of Chicago. While these lessons take their point of departure from the war, they are by no means limited to war facts, but provide materials of permanent value for a broad range of civic instruction.

In addition to these phases of civic education which fall under the jurisdiction of various divisions of the bureau, special attention has also been given to the forms and methods of civic training in the public elementary and high schools. This phase of the work has been in charge of a special agent in civic education. The work of the special agent has been chiefly (1) to keep in as close touch as possible with the work the schools of the country are actually doing in training for citizenship; (2) to disseminate suggestions regarding plans and methods of civic training; (3) to consider especially the content and methods of civic training in their adaptation to particular group needs, as for rural schools, immigrant groups, youth who have left school but who are not yet 21 years of age, etc. In this connection the special agent cooperates with the various divisions of the bureau; and (4) to act as adviser to local and State school authorities who desire help in organizing civic education in their schools.

During the past year the special agent was lent to the State Board of Education of Massachusetts for a period of three months, to assist it in putting into effect the new law of that State requiring "training in the duties of citizenship" in all the schools of the State. During the three months he—

1. Prepared two bulletins which were issued by the State board and placed in the hands of every teacher in the State. One was on "Training in the Duties of Citizenship" and the other on "Instruction and Practice in the Duties of Citizenship."

2. Held conferences in every part of the State with elementary and high school teachers, principals and superintendents, and principals and teachers of the State normal schools.

3. Conducted two training courses for teachers and principals; one in Boston attended by nearly 200 teachers and principals from eastern Massachusetts, weekly for six weeks; the other for the same duration of time in Springfield, attended by about 75 teachers and principals from that part of the State.

4. Met regularly with committees appointed by the State school authorities to reorganize the courses of study with especial reference to emphasis upon civic training.

5. Visited city and rural schools in every part of the State to ascertain conditions and to suggest plans of reorganization.

One of the recommendations made to the State commissioner of education was for the establishment of at least two demonstration centers, or experiment centers, for—

the installation, in such schools and grades as may be decided upon, of a carefully worked out plan of civic instruction and training; the continuous supervision of the installation and development of the plan during a considerable period of time by an experienced supervisor in this field of education; and the holding of frequent conferences with the principals and teachers in charge for the discussion of plans and methods, and of the results as they develop. * * *

(1) One in a city of the type of Lawrence. A city of this type presents (*a*) the general urban situation, (*b*) a characteristic industrial situation, and (*c*) a typical foreign problem.

(2) A second center in a community * * * presenting the rural and the village, or small city, problems.

Since this recommendation was made there has been inaugurated in Lawrence "The Lawrence Plan for Education in Citizenship." A school has been selected, the entire work of which, including course of study and activities, is being reorganized with training for citizenship as the central idea. The work is being done with the cooperation of the city school authorities, the State department of education, the staff of the State normal school at Lowell, and the National Security League. It is under the immediate direction of a committee of which the superintendent of the Lawrence schools is chairman, the principal of the Lowell State Normal School secretary, and Profs. Hanus and Hart, of Harvard, members. An advisory committee consists of Henry H. Chamberlain, of the Massachusetts Division of the National Security League, Robert M. McElroy, educational director of the National Security League, and Payson Smith, State commissioner of education.

The special agent has spent considerable time during the past year away from the bureau in work with other localities and groups. As for his work while in the bureau, it has been diverted largely from its normal course by the necessities of the war. Much of his time has been spent in cooperation with others in preparing materials relating to the war for use in the schools. In this connection it may not be out of place to make a brief general statement regarding the effect of the war upon the development of civic education in this country. It is too early to know what permanent effects upon our program of civic education the experiences of the war will have; but if the lessons that they bring are thoroughly learned, the year just passed will have been one of tremendous progress in this field.

"We are making citizens of our soldiers, while we are making soldiers of our citizens," is the comment of one who describes the painstaking care with which an officer explained to his new recruits the meaning of the salute. "The salute is going to be rigidly enforced in this Army, and I want you boys to get the right idea of it." "I want you to know what you salute and why." "When you salute me, you are simply rendering respect to the power I represent; and the power I represent is you. Now let me explain," etc.

But the President has said, "It is not an army that we must shape and train for war * * * it is a nation." The mobilization of the Nation for war has unquestionably been a civic-educational process. But further than this, it has awakened a consciousness of the need for continuous, organized training for citizenship as one of the measures of preparedness to meet national emergencies whether in peace or in war. It has led the President to urge more universal and more definite study of our community and national life. It has already stimulated the schools and other agencies to unprecedented effort to provide civic training.

Evidence of this is abundant, though it has not yet been systematically collected and organized. For instance, reports received from the departments of education of most of the States attest a marked intensification of interest in civic education during the last year, an interest which has found expression in the press, in legislation in a number of States, in the revision of courses of study to make citizenship a more conspicuous aim, and in efforts to give to the war activities of the schools an enduring civic value. It is seen in the increased attention to the problems of Americanization, and in the stimulus given to community organization for educational purposes and for united action.

The increased effort in such directions has been inspired primarily as a war measure, without consciousness, in all cases, of its ultimate significance in terms of fundamental aims and methods of civic training. But, taken as a whole, the war situation and the activities resulting from it have been of distinct civic-educational value, and have given a marked impetus to the movement for more universal and more effective civic training. While we are pouring out our life blood and our treasure for the principles of democracy, the truth has been borne in upon us that those principles are safe only when put into practice, and that the practice of democracy can be achieved only by the slower processes of evolution and of education, and especially of education.

LIBRARY.

As aids in the study of conditions arising from the war, the library prepared and circulated bibliographies on various topics, in-

cluding the following: Education as affected in general by the war, both in the United States and Europe; teaching of German in the public schools; education of illiterates; Americanization of aliens; civic education; education in patriotism; military education; and reeducation of crippled soldiers. Further assistance was given to special students of education and the war by the loan of books from the library. The division also suggested topics connected with the war for essays and orations for high-school graduates, and supplied references to sources of information on some of these subjects. A select list for public-school pupils was also compiled of books containing personal experiences of soldiers in the war, poetry of the war, and standard patriotic prose and poetry. This list was requested for inclusion in one of a series of lessons projected by the bureau.

Upon request of the library war service, the division prepared lists of school and college textbooks in various subjects suitable for the use of soldiers desiring to study these subjects in cantonments or military posts. The library war service undertakes to supply these books in its camp libraries, and reports that it has found the lists extremely useful in this connection. During the year, special attention has also been given in the monthly record of current educational publications to listing and annotating the literature of education in relation to the war.

Ten monthly numbers of the record of educational publications were issued during the year, together with an index number to the 1917 series. The lantern slides of public and school libraries and the school library exhibit have continued to be used to some extent by borrowers outside of Washington.

Statistics of business transacted by the library during the year show the following: Volumes and pamphlets added by gift, by exchange, and by purchase, 2,340; by copyright transfer from the Library of Congress, 691; serial numbers accessioned, 8,801; periodical numbers, 8,913; volumes received from the bindery, 1,043. The number of volumes catalogued and classified was 4,114; bibliographies compiled, 144. Volumes loaned to borrowers outside the office amounted to 2,380, and 3,113 letters requesting books or information were answered, many of them by supplying copies of the library's bibliographies on the subjects to which the inquiries referred.

MEETINGS AND ADDRESSES.

While the greater part of the bureau's contribution to the progress of American education must be given through the medium of the printed page, the small travel expense fund has made it possible for the bureau to comply with a very limited number of the requests that

have come to it for addresses on educational subjects. In a considerable number of cases associations and institutions desiring the services of specialists were able to defray the expenses incurred by specialists and thus made it possible for the bureau to comply with their requests for addresses. A much larger appropriation for traveling expenses is absolutely necessary to enable the bureau to serve the entire country without partiality.

CORRESPONDENCE.

The report of the mails and files division at Washington shows for the year ending June 30, 1918:

Letters received	162,479
Library publications received	34,780
Statistical reports received	43,578
Documents distributed	802,835
Mimeographed letters sent out	626,621
United States School Garden Army leaflets sent out	1,343,100

The offices and stations of the bureau outside of Washington report for the same period:

Letters received	29,070
Statistical reports received	6,922
Printed and mimeographed material sent out	956,479

These figures show that the correspondence of the bureau is growing rapidly. The number of pieces of first-class mail received is almost 25,000 in excess of the number received during the preceding year.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1919

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919

THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to date.

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LETTER OF TRANSMITTAL.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, November 10, 1919.

SIR: As required by law, I am transmitting herewith the Report of the Commissioner of Education for the fiscal year ended June 30, 1919. According to the policy adopted with your approval three years ago, this report is in the form of the briefest possible summary of the most important events and tendencies in education for the year. A fuller and more complete report of education in the United States and other countries for this period will be included in the Biennial Survey of Education for the years 1918–19 and 1919–20, which will be submitted for publication in separate parts and in two volumes as soon as possible after the close of the current fiscal year. Within the year for which this report is made the activities in several departments of the bureau were largely increased and new work was undertaken in the School Board Service Division and the Division of Educational Extension. Summaries of this increased and additional work will be found in Part III of this report, which contains brief summaries of all the more important activities of the bureau.

The nation-wide feeling for the need of reconstructions and readjustments in education to meet the new conditions brought about by the World War have multiplied the demands made upon this bureau for such help and such strong leadership in all phases of the educational life and work of the country as can not be given unless the bureau has much larger appropriations than it now has. I would, therefore, ask special attention to the following recommendations which were submitted with my annual statement to you for the fiscal year for which this report is made:

1. An increase in the salaries of chief clerk, editor, statistician, specialist in land-grant college statistics, specialist in higher education, and other specialists, and the removal of the limit on amount of salaries which may be paid from the lump-sum appropriation for rural education, industrial education, and school sanitation and hygiene and for other purposes. The duties of these positions require the services of men and women of such kind and degree of ability as demand salaries much larger than are now paid in this bureau.

2. An assistant commissioner and a private secretary to the commissioner at salaries large enough to obtain competent persons in both places. The duties of the office make it necessary for the commissioner to visit distant parts of the country and to be absent from the office frequently many days at a time, and the details of the work of the office of the commissioner have increased to such an extent that he has little time for the more important work of formulating policies of the bureau and performing the more important duties which can not be performed by assistants. There should be an assistant commissioner to carry on the work in the office during the absence of the commissioner and to relieve him of much of the routine of office work, and a private secretary for the performance of the ordinary secretarial duties necessary to permit the commissioner to do his work effectively.

3. An assistant editor. The editorial work of the office has increased more than sixfold within the past seven years, and it must increase still more within the next few years. It is now impossible for one editor to perform satisfactorily all the required editorial work. The more careful editing of the reports and bulletins of the bureau which this addition to the editorial staff would make possible would save each year in the cost of printing much more than the salary of an assistant editor.

4. A specialist in foreign and domestic systems of education and an assistant in foreign systems of education. This bureau is undertaking to keep the people of the United States informed as to all important progress in education and in methods of teaching in all countries of the world. The radical revolution in education in most countries which will follow the making of peace and which has already begun in several of the more important nations makes it imperative that this work be done thoroughly and well; if it is not, the educational interest of this country will suffer great and irreparable loss. It can not be so done without the additional assistance indicated.

5. Two additional collectors and compilers of statistics. Material for prompt and reliable statistical reports can not be had by this bureau without occasional visits to State and city education offices and the first-hand study of their returns. For the progress of education in the United States and for such an understanding of State and local systems of education as will promote the desired degree of uniformity, it is very important that this bureau shall, in cooperation with State and city school officers, devise and execute plans for greater uniformity in reporting and assisting the several States in making their reports more comprehensive and complete. This is not possible with the small force the bureau now has for this work.

6. A comparatively large increase in the number of clerks, stenographers, copyists, laborers, and messengers to do the work of the bureau as it is now organized, and a still larger increase to do such additional work of this nature as may be made necessary by any enlargement that may be made in the staff of specialists.

7. An appropriation of $10,000 to equip the bureau with modern labor-saving devices. For the want of such devices the clerical work of the bureau is greatly retarded.

8. An increase of appropriation for traveling expenses for the commissioner and employees acting under his direction. This is necessary to enable them to make original investigations in education in different parts of the country and to disseminate information by meeting with educational associations and other societies interested in education. Without funds sufficient to pay necessary traveling expenses, the bureau can not do its work effectively and must constantly be open to the charge of giving help where expenses can be paid rather than where help is most needed. The act which established the bureau requires that it disseminate information in regard to education and that it assist the States in the establishment of better school systems. Both these, as well as the investigations necessary for the acquiring of knowledge of education, require the frequent presence of the commissioner and other members of the bureau in all parts of the country. The current appropriation of $75,000 for travel is entirely inadequate.

9. For the printing of the annual report of the commissioner and the bulletins and circulars which should issue from the bureau each year there should be available not less than $100,000. The growing importance of education in our national life, the large expenditures for schools and other agencies of education, the increasing extension and differentiation of education to meet the new and increasing needs of industrial and civic life have created a demand for such information as is contained in these publications in many and widely varied fields of education. From no other source can this demand be supplied than from this bureau, and from this bureau it should be met as fully as possible. This will require the printing of a large number of bulletins each year, and many of these should be printed in much larger editions. The limit of 12,500 copies for any edition of a bulletin should be removed, so that it may be printed in such numbers as in the judgment of the Secretary of the Interior may be necessary. Fifty or a hundred thousand school officers can not be supplied from an edition of 12,500 copies of a bulletin on a subject in which they are all equally interested.

10. Additional specialists in higher education, including education in universities, colleges, schools of technology, schools of profes-

sional education, and normal schools. The constant and increasing demands from these schools for the help of the bureau in making surveys and for advice as to their reconstruction and better coordination are larger and far more numerous than the bureau can meet with its present force. There is special need of an able man, familiar with agricultural education and the problems of Negro education in the South, to devote his entire time and attention to the colleges of agriculture for Negroes in the Southern States. Such a man might easily make the use of the $1,200,000 by these schools, of which $282,121 are appropriated by the Federal Government, from 25 to 50 per cent more valuable than it now is.

11. A much larger appropriation for the division of school-directed home gardening. The proper education of many millions of children, and even the possibility of their attending school at all during the years in which attendance at school is most valuable, depend to a very large extent upon the general adoption of the work which the bureau is promoting through this division. It is very important that there should be in the bureau a sufficient number of specialists in this subject to visit all cities, towns, and manufacturing villages in the country, advise with their school officials and teachers, and assist in directing the work of teachers until the plan is well enough understood and there are enough trained teachers so that the work in any city or town may go on without outside direction, or until the several States have made provision for the direction of the work from their offices of education. The enactment of child-labor laws prohibiting the employment of children under 14 years of age in mills, mines, and quarries must result in enforced idleness of hundreds of thousands of boys and girls and in unnecessary hardships to them and their parents unless there be found for them some form of suitable employment economically profitable and at the same time educational. Results obtained through home and school gardening confirm the belief that both economically and educationally this is one of the very best forms of employment for children between the ages of 8 and 14 years. Results of the increased work of this division made possible by an allotment from the appropriation for the national security and defense of $50,000 for the last quarter of the fiscal year ended June 30, 1918, and an allotment of $200,000 for the last fiscal year show most clearly its value for production and education. If this work can be continued on this scale for a few years more it is believed that it will come to be recognized as an essential part of the school work of cities, towns, and industrial villages, thus enriching the educational life of boys and girls of these communities by an element otherwise impossible for them.

12. An increase in the number of specialists and assistants in rural education and industrial education. The few specialists now em-

ployed in these subjects are wholly unable to do more than a small part of the work needed. States are asking for expert advice in regard to school legislation and the improvement of their school systems. States, counties, and local communities want comprehensive and detailed school surveys. There is need and demand for such general and authoritative studies of school administration, courses of study, methods of teaching, and adaptation of the work of the schools to the life and needs of the communities which they serve as can be made effectively only by a large group of men and women of the best ability working under the direction of the Federal Government. The passage of the Federal vocation act—the so-called Smith-Hughes Act—and the creation of the Federal Board for Vocational Education relieves the Bureau of Education to a certain extent of responsibility in regard to vocational education in certain classes of schools and for certain classes of persons, but at the same time it emphasizes the importance of the work which the bureau should do for vocational education in other schools and for other classes of persons and adds in large measure to its responsibilities in regard to these subjects.

13. The addition of two or three specialists to the division of commercial education for the investigation of problems of commercial education and to assist in making plans and finding means for the preparation of our young people for participation in the larger commercial life upon which the country is now entering. The rapid expansion of the foreign commerce of the United States, because of the war and for other reasons more permanent, makes the needs of this division more pressing than when it was first recommended some years ago.

14. More adequate provision for the investigation and promotion of school sanitation and hygiene and the physical education and development of pupils. More than 20,000,000 children spend a good part of their time each year in public and private schools in the United States. They come to these schools that they may gain preparation and strength for life. In many of the schools the heating, lighting, ventilation, and other means of sanitation are so poor that instead of gaining strength for life they have the seeds of disease and death sown in their systems. In many other schools the daily regimen is such as to cause the children to lose a very large per cent of that which they might gain with a better regimen. From State, county, and city school officers, in all parts of the country, thousands of requests come to the bureau for information and advice in regard to these matters. The bureau should be able to give accurate information and sound advice regarding various phases of this subject. The establishment of health and right health habits and the best types of physical education must be considered most important and

vital factors in any education that is to fit for life. Provision for such games, plays, drills, and other exercises as will develop physical strength, bodily control, and endurance is essential to the schools of any nation that would maintain for all its citizens a high degree of preparedness for the duties both of peace and of war. Facts revealed by the physical examination of volunteers for the Army and the Navy and of selected men in the Army show most clearly the need for this service.

15. The addition of several specialists and assistants in the division of city-school administration for the investigation of problems of education and school administration in cities and towns. The drift of population to the cities and towns continues, and the proportion of urban population to rural population is increasing rapidly. Almost one-half of the children of the United States now live in cities, towns, and densely-populated suburban communities. In some sections of the country a very large proportion of these children are the children of foreign-born parents. All this adds to the complexity and difficulty of the problems of city-school administration, especially in the larger cities. Many hundreds of requests for advice and information in regard to these problems come to the bureau every year. Within the last few years requests have come to the bureau for comprehensive educational surveys in dozens of cities, and many other cities have appealed to other agencies for work of this kind because their superintendents and boards of education knew that this bureau was not equipped as it should be to do this work. If the right education of the 12,000,000 children who live in cities is a matter of interest to the Nation as a whole, then this bureau should be enabled to do effectively those things which no other agency can do to assist the school officers and teachers of these cities in making the work of their schools more effective. The large and increasing number of requests for comprehensive surveys of city-school systems and for advice and assistance in the readjustment of courses of study and in regard to other phases of city-school administration make it necessary for the bureau to be able to do the work of this division more effectively if it is to retain the respect of school officers interested in this very large and important part of our school system as a reliable and effective agency for information, advice, and assistance.

16. The establishment of a division with specialists and assistants for the investigation of the education of exceptional children. There are in the United States more than 2,000,000 children whose education requires means varying widely from those in common use for the education of normal children. This includes subnormal children, the deaf, the blind, the crippled, the incorrigible, the diseased, and those whose superiority, general or specific, makes it desirable that they be given special opportunities in particular subjects or for

general promotion. These children are to be found in cities, towns, and rural communities alike, and all school officers and teachers have to deal with them. The Bureau of Education can not be considered as performing its duties to all the population with impartiality until it has in its service men and women who can give accurate information and helpful advice in regard to the education of these children.

17. A careful and thorough investigation as to the means of better education of children in their homes and the dissemination of information as to the best methods for the early physical, mental, and moral education of children in the home and for the better cooperation of home and school in the education of children of school age. Children of the United States are in school less than 4 per cent of their time from birth to 21. The home is the primary and fundamental educational institution. Schools and other agencies are only secondary. If education in the home fails, no other agency can make good the failure. With our changing civilization and social and industrial life, there is need for more careful study of education in the home. The cooperative arrangement with the National Congress of Mothers and Parent Teacher Association, by which work of this kind had been maintained on a small scale until the 1st of July of this year, is no longer legal. Congress should make an appropriation sufficiently large to enable it to be continued and largely extended. If an appropriation is made for educational extension, as recommended elsewhere, this work might well be included with that.

18. Provision for the investigation of the education of adult illiterates and the dissemination of information as to the best methods of teaching illiterate men and women to read and write and of extending the meager education of those who were denied the advantages of the schools in their childhood and youth. According to the census of 1910, there were in the United States more than 5,500,000 illiterate men and women and children over the age when they may be expected to make a beginning in the public schools, and there were many millions more barely able to read and write. This illiteracy is a burden to society and a menace to State and Nation. Within the past few years much interest in the removal of this burden has developed, and from all sides come requests for assistance of many kinds from this bureau. The response to the little attention which this bureau has been able to give to this subject indicates that States, local communities, individuals, and benevolent societies are ready to cooperate heartily with the Federal Government in any reasonable plans which may be devised and presented for this purpose.

19. The work of instructing persons of foreign birth in the English language and in the geography, history, ideals, industrial re-

quirements, and manners and customs of our country—the work generally known as Americanization—is so very important that it should be promoted, both by National and State aid. There are in the United States between thirteen and fifteen millions of persons of foreign birth. Of these approximately 5,000,000 can not read, write, or speak the English language, and approximately 2,500,000 of them can not read or write in any language. Such a large proportion of our population unassimilated constitutes a constant menace. With a sufficient appropriation to assist in paying the salaries of teachers and State and local supervisors and funds for a staff of experts under its immediate direction, the Bureau of Education could promote effectively this work of Americanization, so vitally important to the strength and welfare of the Nation. The passage of the bill now pending in both Houses of Congress for the appropriation of $14,250,000 a year for seven years for the purpose of enabling the Federal Government through this bureau to cooperate with the several States in this and in the teaching of native-born illiterate men and women would have results of incalculable value. It is sincerely hoped that this bill may become law.

20. The value of stereopticon and stereoscopic slides, moving-picture films, and phonographic records in school instruction and for extension education through community organizations, women's clubs, and other societies is well established, and there is need and an increasing demand for a central agency for the production and circulation of such slides, films, and records. The Bureau of Education, in cooperation with State and city departments of education and institutions of higher learning, might render an invaluable service in this field at small cost. The eagerness with which university extension divisions and other educational extension agencies have responded to the bureau's offer of cooperation in the obtaining and distribution of five or six million feet of films, mostly war and public-health films, indicate what might be done with an adequate appropriation for this purpose.

21. The value of and need for community organization, especially in rural communities, become constantly more apparent, and interest in the subject has extended to all parts of the country. The experience of three years has shown that such organization can be promoted most effectively by the Bureau of Education in cooperation with State departments of education. A community organization in every school district in the United States and their Territories and possessions would be incalculably valuable for the period of reconstruction following the war. It is therefore recommended that the personnel and equipment of the bureau for this work be largely increased. If the appropriation recommended for the Division of Educational

Extension in the bureau is made, this work of community organization should be included under it.

22. The immediate establishment of a division of educational extension to continue and expand the work begun in the last half of the last fiscal year by the bureau, with an allotment of $75,000 from the President's fund for the national security and defense. Interest in educational extension work has grown rapidly within the last few years and results already obtained show conclusively its value. The special need for such work now and for the next few years is indicated by the following facts: (1) That of the 4,000,000 recently discharged soldiers, nearly all of whom are eager for opportunities to extend their education for vocational efficiency, for citizenship, and for general culture, few can go to college, and fewer still will enter ordinary high schools, and practically all must depend on such opportunities as the educational extension agencies may offer; (2) that millions of laboring men and women now having shorter hours and receiving larger pay than ever before are eager for opportunities for instruction, especially in things pertaining to economics, civic rights and duties, and better living; (3) that millions of women recently enfranchised, or now about to be endowed with the right of suffrage by the ratification of the Nineteenth Amendment of the Constitution of the United States, are eager for opportunities for instruction in regard to forms of government and civic and political problems; (4) that millions of foreign-born men and women among us, both of those who have taken out citizenship papers and those who have not, although able to speak, read, and write the English language, need to be instructed in regard to the geography, history, ideals, manners, and customs and industrial and economic opportunities in this country; (5) that two and a quarter million boys and girls are every year attaining their majority and entering the ranks of active citizens with the right of suffrage at a time when the problems of active citizenship are more numerous, complex, and difficult than ever before in our history, and that few of these have had any adequate instruction in the principles of democracy and in regard to the vital problems with which they must deal. Less than one-third of them have had any high-school education and less than one-eighth have graduated from a high school. To respond effectively to the opportunities and needs for extension education thus indicated will mean much for all the economic, civic, and cultural interests of the country. Not only should Congress make an appropriation for the maintenance of a division of educational extension as herein suggested, it should also, I believe, make liberal appropriations for cooperation with the States in promoting extension education in health, trades and industries, civic duties, and general culture, com-

patible to the appropriations now made for cooperation with the States in extension education in agriculture and home economics.

23. An annual appropriation of $25,000 to enable the Bureau of Education to continue and enlarge its work of studying the problems of the education of Negroes in the United States and the education of backward peoples in the Territories and possessions of the United States. The adaptation of the means of education to these people involve many difficult problems to the solution of which comparatively little attention has been given, but without whose solution much of the money expended from both public and private sources for schools and other means of their education will be lost and their development and progress greatly retarded. When an appropriation is made for the reestablishment of the Division for the Education of Negroes and Backward Peoples the man recommended in section 10 of these recommendations to give his entire time and attention to the colleges of agriculture for Negroes in the Southern States might well be attached to this division instead of to the Division of Higher Education.

24. An appropriation of $40,000 a year to enable the Bureau of Education to continue the School Board Service Division, established and maintained through the last half of the fiscal year with the help of an allotment from the President's fund for the national security and defense, for the purpose of assisting boards of education of city and country schools and boards of trustees of universities, colleges, normal schools, and technical schools in finding teachers of the grade and kind that are sought from the country at large rather than from local communities. The emergency for the relief of which this division was established is now and will remain for several years almost as great as it was before the signing of the armistice and the beginning of the return of men from the Army and of men and women from the industries connected with the war. The great industrial development which must follow the establishment of peace and the unusually high wages paid in the industries will continue to attract many teachers from the schools, and even when conditions have become more normal there will still be great need for the service which only such an agency as this can render.

25. Means to enable the bureau to cooperate with schools of education in colleges and universities, with normal schools, and with city and county school systems in making important investigations and definite experiments in elementary and secondary school education under scientific control. There is as much need for scientific experiments in education as there is for such experiments in agriculture or engineering. Although we are spending annually many hundreds of millions of dollars on public education, we have little accurate and definite knowledge about the value of various forms of

education and methods of teaching, and we can have little more until provision is made for such scientific experiments as are here indicated. With a comparatively small amount of money the bureau might obtain the cooperation of individuals, institutions, and boards of education in making important investigations and experiments in education not otherwise possible without much larger expenditures.

26. Means to enable the Bureau of Education to cooperate with State and county school officers in establishing and maintaining model rural schools for the purpose of demonstrating the value of such forms of rural school organization, management, courses of study, and methods of teaching as may appear to be most desirable to be incorporated in the rural schools of the several States and communities of the United States. A bill appropriating $275,000 a year for this purpose is now pending in the Senate. Its passage would, within a few years, add much to the effectiveness of the rural schools of the several States.

27. A larger appropriation to enable the Secretary of the Interior, in his discretion and under his direction, and with the advice and cooperation of the Public Health Service, to provide for the medical and sanitary relief of the Eskimos, Aleuts, Indians, and other natives of Alaska. Careful investigations made with the cooperation of the Public Health Service some years ago showed the necessity of immediate provision for the care of the health of the natives of this Territory and for the eradication of communicable diseases now prevalent in different sections of the Territory which, if not put under immediate control, will soon destroy the lives of many of these people and spread among the white settlers. To do what is needed will require an annual appropriation of not less than $125,000. The appropriation for the education of natives in Alaska should be increased to not less than $300,000 to enable the bureau to more fully equip some of the schools and to establish schools in several villages in which none have yet been established, and where there are no agencies for the civilization and the care of the natives, and to enable the bureau to care for and properly educate the large number of orphans whose parents died during the epidemic of influenza last fall and winter.

28. The time has come when the natives in all parts of Alaska should be assisted and directed in the establishment and development of industries of their own which will give them remunerative employment through much of the time in which they are now more or less idle, and by which they may make for themselves a better support and gradually take over the larger part of the cost of their own schools and medical attendance. The success of the reindeer industry in the northwestern part of Alaska and of cooperative stores, fish canneries, sawmills, and other industries in southeast-

ern Alaska show clearly the importance of such assistance. Ten thousand dollars a year judiciously expended for this purpose through the next 10 or 15 years would finally save hundreds of thousands of dollars to the Government by making these people more competent to care for their own needs.

29. For the work which the bureau now does more room is needed, and still more will be needed as its staff of experts and clerks is increased. There is now need for more and better arranged space for the bureau's library, which is increasing from year to year. The Nation needs an educational museum, a kind of perpetual educational exhibit, in which there may be found at any time, properly arranged and catalogued, typical courses of study, samples of school furniture, and equipment of all kinds, specimens of school work, plans and photographs of buildings and grounds, and whatever else may be helpful in enabling students of education and school officers and teachers to gain an accurate and comprehensive knowledge of purposes, methods, and results of education in this and other countries, and assist them in forming ideas for the improvement of their own schools and school work. This museum should, of course, be under the direction of the Bureau of Education and should constitute an essential part of its equipment. The work of the Federal Board for Vocational Education, of which the Commissioner of Education is a member, is so closely related to that of this bureau that it would add to the efficiency both of the board and of the bureau if they were housed in the same building, so that they might have easy access to the same library and communicate easily with each other; and there are other important activities of the Government which could be carried on more effectively under the same conditions. I, therefore, renew the recommendations contained in previous statements that plans be considered at once for the erection of a building that will afford ample room for the work of the bureau and allied activities of the Government, house the bureau's library, and furnish ample room for such collections of materials as those mentioned above. It would, I believe, be entirely proper that such a building be erected in memorial of the patriotic services rendered by the schools and their teachers and pupils during the great war, and these teachers and children might well be permitted to contribute to the cost of the building.

Respectfully submitted.

P. P. Claxton, *Commissioner.*

The Secretary of the Interior.

REPORT OF THE COMMISSIONER OF EDUCATION.

PART I.

SOME ASPECTS OF EDUCATION IN THE UNITED STATES.

I. HIGHER EDUCATION.

The academic year which has just closed represents an unprecedented period in the history of American higher education. Educational institutions were wholly absorbed in the task of training for military service and in readjusting themselves to meet the problems of peace after the signing of the armistice. It was therefore not a year of progress, except as certain of the experiments in training officers in civilian institutions may react later upon the normal academic procedure.

The report of the Commissioner of Education for 1918 contained an outline of the efforts which were made by agencies both inside and outside of the Government to bring the vast training facilities of the colleges and universities directly into the service of the military establishments. Early in the year 1918 the War Department, through the creation of its committee on education and special training, definitely undertook to make use of these facilities. The organization by this committee of the National Army Training Detachments for the education of technicians was described and the proposed organization of the Students' Army Training Corps was summarized. Since the preparation of that report the Students' Army Training Corps has come and gone. It was unquestionably the outstanding educational event of the year. Briefly, therefore, it should be discussed in this review of the progress of education.

A letter was addressed by the Secretary of War to presidents of colleges, on May 6, 1918, as follows:

> In order to provide military instruction for the college students of the country during the present emergency, a comprehensive plan will be put in effect by the War Department, beginning with the next college year, in Sep-

tember, 1918. The details remain to be worked out, but in general the plan will be as follows:

Military instruction under officers and noncommissioned officers of the Army will be provided in every institution of college grade which enrolls for the instruction 100 or more able-bodied students over the age of 18. The necessary military equipment will, so far as possible, be provided by the Government. A military training unit will be created in each institution. Enlistment will be purely voluntary, but all students over the age of 18 will be encouraged to enlist. The enlistment will constitute the student a member of the Army of the United States, liable to active duty at the call of the President. It will, however, be the policy of the Government not to call the members of the training units to active duty until they have reached the age of 21, unless urgent military necessity compels an earlier call. Students under 18, and therefore not legally eligible for enlistment, will be encouraged to enroll in the training units. Provision will be made for coordinating the Reserve Officers' Training Corps system, which exists in about one-third of the collegiate institutions, with this broader plan.

This new policy aims to accomplish a twofold object: First, to develop as a great military asset the large body of young men in the colleges; and second, to prevent unnecessary and wasteful depletion of the colleges through indiscriminate volunteering, by offering to the students a definite and immediate military status.

Later announcement will be made of the details of the new system. In the meantime, presidents of collegiate institutions are requested to call this matter to the attention of all their students. Those who do not graduate this spring should be urged to continue their education and take advantage of this new opportunity to serve the Nation.

This letter was the first announcement of the Students' Army Training Corps. It was followed by a more definite and detailed statement in the latter part of June. It was the original intention of the War Department to interfere as little as possible with the freedom and independence of colleges. While providing facilities for military training and furnishing young men a strong incentive to attend college, the department expected to leave full liberty of action to college officers, in the development of courses and in the conduct of the institutions. Plans were made during the summer by the committee to put the Students' Army Training Corps into operation on this basis. The committee also indorsed a campaign for collegiate enrollments, which was undertaken by the American Council on Education and the Bureau of Education.

While these arrangements were being made the military situation changed. It became imperative to deploy America's forces on a vastly greater scale. On recommendation of the Secretary of War and the Chief of Staff, therefore, Congress passed the man-power bill August 30. This action necessitated two radical modifications of the Students' Army Training Corps plan: First, there was no possibility of keeping a large number of men in college for two or three years prior to their attainment of draft age. The new draft ages were from 18 to 45. Second, a very greatly increased number of

officers were demanded for the new armies of the autumn of 1918 and the spring of 1919. The central officers' schools could not be relied upon to furnish all of these. Colleges must be regarded as one of the principal sources of officer material.

Authorization for the creation of the Students' Army Training Corps as an active military unit was therefore secured from the President, and the following General Order No. 79 issued on August 24, 1918:

> Under the authority conferred by sections 1, 2, 8, and 9 of the act of Congress authorizing the President to increase temporarily the Military Establishment of the United States, approved May 18, 1917, the President directs that for the period of the existing emergency there shall be raised and maintained by voluntary induction and draft a Students' Army Training Corps. Units of this corps will be authorized by the Secretary of War at educational institutions that meet the requirements laid down in the regulations.

The fundamental difference between the student soldier under the first plan for the Students' Army Training Corps and the member of that corps under the revised plan was that now he became a soldier on active duty. This meant that he must be constantly under military control; that he must be housed, clothed, and subsisted by the Government. The relations of the War Department to the colleges therefore were radically changed overnight. Colleges which had been approved for units of the Students' Army Training Corps under the first plan were now asked to contract with the War Department for the housing, feeding, and instruction of student soldiers, who should be at all times under military authority. It is a striking testimony of the patriotism of the colleges that practically all of them consented to enter this arrangement; 525 higher institutions were authorized to maintain units of the Students' Army Training Corps.

On the administrative side difficulties at once arose, which the committee indeed foresaw but could not remedy. The members of the corps were theoretically at all times under military control. College officers, relieved of discipline and deposed from their ordinary authority, were nevertheless in a measure responsible for the academic progress of members of the corps. There was divided responsibility therefore, and an unfortunate dualism of authority which was never remedied before the demobilization of the Students' Army Training Corps.

The Students' Army Training Corps had a brief 10 weeks of life. Part of this pediod, moreover, was rendered useless in many institutions by the influenza epidemic which swept the country in the months of October and November, 1918. Indeed, the Students' Army Training Corps ran just long enough to develop all the possible centers of friction and to expose all its serious defects. The orders for its demobilization came before these defects could be remedied.

Nevertheless, there were certain educational concepts involved in the plans for the corps which are worth recording. These have been recognized and appreciated by many college officers.

1. *Needs.*—Like the trade training in the National Army training detachments, the officers' training carried forward in the Students' Army Training Corps was to have been predicated upon a careful estimate of the needs of the Army for various kinds of officers. For example, the committee discovered that the Infantry service would require from the colleges 3,000 officers a month from October, 1918, and that the Field Artillery would require 2,000 a month. It analyzed the work which each of these types of officers would have to perform and the problems which they would have to meet. It then proceeded to organize courses to fit men directly for these tasks. The courses were orginally outlined in consultation with officers from the various services. They were being modified and elaborated at the time of the demobilization of the Students' Army Training Corps. A system was also about to be inaugurated to assign to each course a number of men corresponding to the number required in that branch of the service for which the particular course was designed to train. It was the committee's purpose to integrate training with Army needs, precisely as it had done in the case of mechanics and artisans.

The first prescribed courses issued to the units of the corps carried out in a tentative way this theory. It was understood that members of the Students' Army Training Corps would be called to active service at the time of the summoning of the age groups to which they generally belonged. Thus it was assumed that 20-year-old registrants would be called by January 1, 1919, that 19-year-old registrants would be called by April 1, 1919, and that the 18-year-old group would be summoned in July or August, 1919. The committee, therefore, required that the college year be divided into quarters. It assumed that 20-year-old students could remain in college three months, 19-year-old students six months, and 18-year-old students nine months. Exceptions were to be made in the case of students of unusual proficiency in specialized curricula, such as engineering, chemistry, medicine, etc. Former college class alignments were abandoned. Curricula were organized leading to each of the principal line and staff services, and divided into quarters. Each curriculum contained certain prescribed subjects. Military drill and a course on the issues of the war were prescribed in every curriculum. In the case of the three months' student the prescriptions were so numerous that there was practically no elective opportunity. A greater amount of freedom of choice was granted to the six months' student; the nine months' student, being allowed to distribute his prescribed work over three quarters, had a considerable amount of academic liberty.

2. *New organization of humanistic training.*—The course on the issues of the war, which was prescribed in every curriculum, was the direct result of the committee's satisfactory experience with the war-aims courses given to members of the National Army Training Detachments. Indeed, the outline for this course was evolved very largely from the questions asked by members of the National Army Training Detachments. The course on the issues of the war combined history, economics, government, literature, and philosophy. It paid no attention to the artificial divisions which have separated these subjects in the past. It aimed rather to bring about a fusion of the essential elements of these and other subjects. The design was to furnish the student soldier with facts, criteria, and inspiration which would enable him to understand his world and to relate his conduct to the major issues of his life. Incidentally the committee's action resulted in breaking down temporarily the illogical barriers between departments which have so long been traditional in academic organization. The courses on the issues of the war could not be fairly tested in practice within a period of six weeks. In many institutions, however, the principle upon which they were based so far commended itself to college officers that these courses are to serve as the model for organizing the fundamental elements of peace-time humanistic training. Commenting upon the permanent value of the war-issues course, Dean Woodbridge, of Columbia, says:

> In the past, education was liberalized by means of the classical tradition. It afforded for educated men a common background of ideas and commonly understood standards of judgment. For the present that tradition no longer suffices. If education is to be liberated again, if our youth are to be freed from the confusion of ideas and standards, no other means looks so attractive as a common knowledge of what the present world of human affairs really is. The war has revealed that world with the impelling clearness which tragedy alone seems able to attain. That our student soldiers may see the issues is of immediate consequence; but the war and its issues will be the absorbing theme of generations to come. To the thoughtful, therefore, the course affords the opportunity to introduce into our education a liberalizing force which will give to the generations to come a common background of ideas and commonly understood standards of judgment.

Eligibility for induction into the Students' Army Corps was originally based upon bona fide college membership. Colleges were expected to enforce their ordinary admission requirements. A larger number of new students than usual were drawn into the colleges, because the Government assumed their expenses and paid them soldiers' pay. The large and continuous supply of officer material which would be demanded, however, could not be produced with certainty if the old formal admission requirements must be observed by every student soldier. The Students' Army Training Corps would have to be recruited from that much larger stratum of the popula-

tion which possessed the capacity to pursue work of college grade but could not meet the formal entrance requirements. Hence a system of recruitment for the corps was devised which combined three elements: (*a*) A personal interview with every candidate, the purpose of which would be to determine the character of his schooling and experience and his general qualifications for college work; (*b*) the Army intelligence test; (*c*) in the case of candidates for courses which by their professional nature demanded special preparation in one or more subjects, such examinations as would be necessary to test the candidate's proficiency in these subjects. This recruitment plan was never issued, because demobilization of the corps was ordered and recruitment ceased. It is undoubtedly cause for regret that a comprehensive experiment with psychological and other objective tests of fitness for college work could not have been made. The material prepared by the committee has, however, interested numerous college officers and has apparently stimulated discussion and careful consideration of its possible application in college-entrance procedure.

Reference has been made to the brief life of the Students' Army Training Corps. To complete the record, it should perhaps here be stated that the corps enrolled some 142,000 men. The signing of the armistice on the 11th of November did away with the need for continuing it as the source of supply for officers. It was ordered demobilized by December 21.

It is, of course, still too early to say what, if any, effects the Students' Army Training Corps may have had upon college methods and organization. There has been, as might be expected, a period of sharp reaction. College officers, smarting under the humiliations imposed by the system of military control, are not disposed to find many virtues in the scheme. On the other hand, aside from the possible influence of the educational policies described above, the influence of military training and discipline upon the student body may have some permanent results. Both faculties and students have recognized the greater efficiency of a student body subject to a military régime. The by-products in the way of physical fitness, development of courtesy, and the spread of a democratic spirit are also too desirable to be lost. Colleges now have before them the task of devising means to retain these tangible advantages of the period of war training. They are also faced with the problem of transforming the spirit of self-sacrifice engendered by the national emergency into a spirit of service to the community and to the Nation in peace. The solution of this problem is admittedly difficult; but unless it is solved America will have lost the best fruits of the war.

It is worth while to point out one fundamental aspect of the Students' Army Training Corps which has not always been recognized.

For the first time in history the higher institutions of the country were united in a common purpose. By offering themselves voluntarily to the War Department they created a single training plant for the production of specialists and officers for the Army. In other words, there was created for a brief period a national system of higher education. Further, the whole training program carried out in this system was based on an accurate forecast of national needs. The conditions were of course abnormal. They could never occur in times of peace; nor is it desirable that higher education should be controlled from the center. Nevertheless, this temporary organization contains important implications upon which the colleges themselves may profitably act.

The Students' Army Training Corps saved colleges from virtual extinction. In the letter announcing the plan (quoted above) the Secretary of War alludes to the preservation of higher education as one of the two important purposes to be attained. In spite of the difficulties of readjustment to a peace basis and in spite of the financial losses (in case of some institutions very great), the higher educational machinery of the United States emerges from the war in more nearly normal condition than that of any other country.

RESERVE OFFICERS' TRAINING CORPS.

When the Students' Army Training Corps was ordered demobilized the Committee on Education and Special Training sought authorization to reestablish in the schools and colleges units of the Reserve Officers' Training Corps, which had been abandoned in favor of the Students' Army Training Corps during the latter part of 1918. Authorization was granted on November 27, 1918, and the committee began to negotiate with the colleges with a view to carrying out the provisions of the order and developing a permanent policy of military training in accordance with the provisions of the national defense act of 1916. The experience with the Students' Army Training Corps, and especially the lessons respecting officer personnel which had been taught by the war, had resulted in essential modifications of the Reserve Officers' Training Corps. Relatively speaking, the United States found little difficulty in securing abundant officer material and in training Infantry officers at short notice. To be sure, the product of the training schools was less expert than the product of West Point; but in any emergency the temporary officer and soldier will always be at a disadvantage when compared with the professional. The outstanding difficulty experienced by the Army was the recruitment of those technical experts needed in the Staff Corps. Engineer officers, officers in the Chemical Warfare Service, officers in the Signal Corps, Ordnance officers could not be produced in a limited number of weeks or months. The war showed indisputably that the

United States must maintain a technical officer reserve. This gave the cue to the new development of the Reserve Officers' Training Corps.

Decision was reached to multiply the types of units which might be established. Thus it was decided that there might be, in addition to Infantry and Cavalry and Artillery units of the Reserve Officers' Training Corps, heavy Artillery units, Chemical Warfare units, Signal Corps units, etc. Technical schools would naturally choose one or more of these technical units. Large universities might be expected to maintain several, including perhaps Infantry units as well. The smaller liberal arts institutions would, as before, maintain Infantry units for the most part. Throughout the spring of 1919 conferences with representatives of the institutions were held, and programs of study which met the general terms of the act and yet which fitted the actual conditions of technical schools were devised.

In working out this revised program the following principles have been observed: The amount of formal military training prescribed for the technical units during the course of the school year is reduced to a minimum. Technical and scientific subjects offered by the institutions as part of their technical curricula are accepted as having military value. The actual military practice is relegated to the six weeks' summer camp, which is regarded as an integral part of the Reserve Officers' Training Corps course. The War Department undertakes to furnish for the benefit of scientific departments of institutions teaching material in the various fields of science which has a distinctly military bearing. Thus an electrical engineering school which has a Signal Corps Reserve Officers' Training Corps unit will receive from the department problems in electricity which officers of the Signal Corps are likely to meet in the coures of their military experience. It is suggested that these may be used by the institution as teaching material in courses of electricity. Effort will be made to have this material of general scientific validity.

FINANCIAL STATUS OF COLLEGES.

It has been stated that the War Department entered into contractual relations with the higher institutions at the time of the establishment of the Students' Army Training Corps. On the strength of these contracts many institutions had borrowed thousands of dollars, assuming that the Students' Army Training Corps would be carried forward until July 1, 1919. This money had been expended for buildings and special equipment and for various other material commodities. The demobilization of the Students' Army Training Corps necessitated an immediate suspension of all these contracts. The situation in which the colleges found themselves was therefore diffi-

cult in the extreme. The actual liquidation of the Government's obligations occupied a period of some seven months. Effort was made to have the settlement a fair one and to reimburse colleges for all actual expenditures. Under the rigid regulations of the Treasury, however, this was not in every case possible. Many institutions suffered some loss. It is an interesting piece of history, however, that the great majority of the claims were settled to the final satisfaction of both contracting parties.

Colleges emerged from the war with somewhat depleted student bodies and, in many cases, with serious indebtedness, contracted in view of the national emergency. They were affected equally with other social organizations by the rapid rise in prices. It is safe to say that, in general, the financial situation of the colleges of the country was less satisfactory during the spring of 1919 than at any time within recent years.

The pressure has not fallen upon administrative boards alone, or even primarily. It has long been notorious that the salaries of college professors are too low for the type of work they are expected to perform and the long period of training that is necessary to prepare them for it. During the past academic year the increase in the cost of living has brought a large number of professors into a position of actual want. It is interesting to note, however, that college administrative boards have very generally recognized their immediate obligations to the instructional staff, in spite of the fact that the income of these institutions is still less adequate than usual to meet the current expenses.

In May, 1919, the Bureau of Education sent out a questionnaire to all collegiate institutions, asking them for a report on the percentage of increase in the salaries granted during the last academic year and the percentage of increase voted for the coming academic year. Approximately half of the institutions answered the questionnaire. Two hundred and thirty reported increases in salaries granted for the last academic year, or voted for the coming year, or both. Seventy-two per cent of those reporting increases in 1918–19 increased the salaries of full professors by 10 per cent or more. Seventy-four per cent of those reporting increases voted for the coming academic year are increasing the salaries of full professors 10 per cent or more. The salary raises of assistant professors and instructors have not, on the whole, been quite so high.

In addition to this general and not widely advertised movement, special campaigns for increase of endowment funds, primarily with a view to paying larger salaries, have been organized by several of the larger institutions. An influential committee of the alumni of Harvard University, for instance, has been organized for the purpose of raising $15,000,000 to add to the endowment of the university.

Princeton has laid plans for adding $14,000,000 to its endowment by a concerted appeal to the alumni and philanthropic friends. It is expected that other institutions will follow the example of these two universities.

THE AMERICAN EXPEDITIONARY FORCES UNIVERSITY AND THE WORK OF AMERICAN SOLDIERS AT FOREIGN INSTITUTIONS.

Perhaps the most unique and spectacular educational event of recent years is represented by the establishment of the American Expeditionary Forces University at Beaune, in France, in February, 1919. The institution owes its origin to a variety of influences. In the early days of the participation of the United States in the war Mr. Anson Phelps Stokes, of Yale University, presented a memorandum to the War Department outlining a plan of education to be carried on in the American forces during the period of demobilization. The plan contemplated the placement of American soldiers and officers in universities of France and Great Britain, together with the establishment of educational centers under Army control for less advanced education.

The experience of the Army Overseas Educational Commission of the Y. M. C. A. and of the Committee on Education and Special Training of the War Department in organizing educational work for soldiers on a large scale emphasized the practicability of Mr. Stokes's general suggestion and indicated the kind of machinery which might be necessary to carry out the project. Shortly after the signing of the armistice the War Department decided to put the general features of the plan into operation. Brig. Gen. Robert I. Rees, formerly chairman of the Committee on Education and Special Training, was sent to France to take charge of the educational work. Cooperative arrangements were made with the Army Overseas Educational Commission of the Y. M. C. A. whereby the commission furnished educational advice and supplied various groups of experts. The following excerpt from General Orders, No. 30, issued February 13, 1919, gives the outline of the educational system for which the Army made itself responsible and indicates the place in the entire program of the American Expeditionary Forces University.

EDUCATIONAL WORK IN THE AMERICAN EXPEDITIONARY FORCES.

I. The Commander in Chief invites the attention of organization commanders and of all officers in the American Expeditionary Forces to the importance of national education. This citizen army must return to the United States prepared to take an active and intelligent part in the future progress of our country. Educational and occupational training should, therefore, be provided to meet the needs of the members of the American Expeditionary Forces, in order that they may become better equipped for their future responsibilities.

1. General Orders, No. 9, c. s., these headquarters, has established a system of post schools, which provides elementary and secondary intruction for all soldiers in need of such training.

2. For more advanced education there will be established in each army corps and division and in each section of the S. O. S. centers of training, to be known as division educational centers. These centers will provide such vocational training as the material and equipment within the division or section makes possible. The following subjects of vocational training will be found practicable in all divisions and sections: Carpentry, telephone repair, telegraphy, wire; telegraphy, wireless; land surveying, road construction, horseshoeing, automobile repairing, cobbling, tailoring, barbering, cooking, baking, nursing. Other subjects as they are found practicable will be authorized.

These centers will also provide instruction in more advanced subjects of general education than can be given in post schools, either because instructors are few or because the demand for such subjects is slight. Subjects suggested are, for example, algebra, trigonometry, mechanical drawing, agricultural salesmanship, economics, American and English literature, advanced French, Italian, Spanish, German, advanced course in history, etc.

In order to determine the demand in each educational center for education, a complete survey of his organization will be made by each commander. On the basis of this survey classes will be organized. Courses will be organized providing the minimum of four hours' instruction and supervised study per day, five days in the week, covering a period of three months. Organization of professional educational companies or detachments conveniently located and provided with proper administrative organization is authorized. Such organizations will be given one hour of military training per day in addition to the education work. The number of students will be limited by the capacity for giving instruction in each division educational center, and will not exceed 15 per cent of the command.

Carefully selected school officers will be detailed in charge of the establishment and operation of division educational centers. School officers and instructors will be excused from all other military duty.

The commanding general S. O. S. is authorized to modify the requirements of this paragraph to meet conditions within his command, giving, however, to the members of his organization every educational opportunity consistent with military necessity.

3. Supplementing and expanding these opportunities within the organizations, officers and soldiers will have the privilege of attending educational institutions of the nations associated with the United States in this war. Arrangements have already been made whereby selected members of the American Expeditionary Forces may be ordered to detached service in attendance on French and British universities during the current spring term, which will terminate June 30, 1919. Soldiers will receive commutation of subsistence at the rate of $2 per day. Soldiers on this duty will be reimbursed on War Department Form No. 330 for actual expenses incurred by them for lodging while on such duty not in excess of $1 per day. Receipts for such expenditures will be obtained if practicable, and if not, affidavits to that effect will be furnished by the soldier. * * *

4. Since the above university opportunities are of graduate character, and are therefore available only to selected men of high educational qualifications, an American Expeditionary Forces educational center will be established to provide college and technical training beyond that offered at division educational centers. Students will enroll for a term period of three months.

5. Students enrolling in post schools and in division educational centers will return with their respective organizations, when ordered, to the United States, except that applications for transfer to other division educational centers for the purpose of completing courses will be favorably considered. Students attending the A. E. F. educational center will have the option of returning to the United States with their organizations or of remaining to complete the term of three months. Students entering French and British universities must agree to remain for the full term.

6. The Army educational commission of the Young Men's Christian Association will assist in every possible way in the development of this educational system.

In the administration of the university a unique blending of military and academic service took place. The university was, of course, formally administered by military authority. Its president was Col. I. L. Reeves. Under him as commanding officer was a complete military organization. As commanding officer also he issued orders governing the nature and the schedule of courses and the personnel of directors and teachers. At the same time the chairman of the Army educational commission of the Young Men's Christian Association, Dr. John Erskine, was appointed educational director of the university and served as chairman of the university council. The Army educational commission advised the president of the university as to general educational policies and recommended to him the appointment of the directors of the colleges and the heads of the departments. The university council recommended to the president action governing the conduct of the academic work.

The faculty of the university was recruited from professional teachers in the Army and directly from civil life in the United States, through the Young Men's Christian Association. After the university had been in operation for six weeks, the civilian teachers engaged were organized into an Army educational corps, which had rank as a temporary service with the A. E. F.

The university included in its organization the following colleges: College of agriculture, college of fine and applied arts, college of business, cadet college, college of correspondence, college of education, college of engineering, college of journalism, college of law, college of letters, college of medical sciences, college of music, college of science, a farm school, and post and division schools. From March 1 to June 11 the student body numbered more than 12,000 American soldiers. There were approximately 700 instructors.[1]

As outlining the problem before the American Expeditionary Forces University and the educational concept of those in charge,

[1] Complete official reports of the American Expeditionary Force University are not yet available. This accounts for the use of approximate figures and for certain vaguenesses in the preceding statement.

the following minutes adopted by the university council, on March 2, are of especial interest:

The unusual conditions under which the American Expeditionary Forces University begins its work, the absence of hampering traditions, and the presence of unusual problems, all suggest an opportunity of organizing here such an educational system as many of us should like to see in the United States; that is, a system so unified from the elementary to the graduate schools that every man can find in college, in post school, or in division school classes the particular instruction that he needs. The entire system will be represented at Beaune, since we shall have here, in addition to the university, a post and a division school. Some fear might possibly be felt, in the absence of our accustomed American machinery for entrance examinations, that the standards of the college and university work may be relaxed. We believe, however, that where an instructor will preserve the proper standard in his course, no possible harm can come to the educational standards of the university. We believe also that in the United States, where an instructor does not preserve the standards in his own course, no system of entrance examinations can protect the standards of the college.

The value of a certificate for work done in this university will therefore depend upon the maintenance of proper standards in each individual course.

The work of education in the Army has obviously a teaching rather than an examining function. It is more important that we should help any member of the American Expeditionary Forces who desires to improve himself than that we should issue certificates. But in order to give the student the most advantageous instruction we shall not hesitate, after a fair trial in any part of our educational system, to recommend his transfer to courses more suited to his needs.

Arrangements were also made, as was noted in the general order quoted above, for the detail of qualified officers and soldiers to attend British and French universities. No final report on the work of these students has yet been received. Some 8,000 were accommodated in French institutions, and 2,027 in the universities of the United Kingdom.

VOLUNTARY AGENCIES.

In the report of the Commissioner of Education for 1918 the establishment of the Emergency Council on Education was noted. This body was organized early in 1918 to accomplish the following purposes:

To place the educational resources of the country more completely at the service of the National Government and its departments, to the end that through an understanding cooperation—

The patriotic services of the public schools, professional schools, and colleges and universities may be augmented;

A continuous supply of educated men may be maintained; and

Greater effectiveness in meeting educational problems arising during and following the war may be secured.

The council was composed of representatives of all the principal national associations dealing with higher education. Fifteen of

these associations were represented during the academic year in the council's membership.

The council changed its name after the first meeting to the American Council on Education. It established headquarters in Washington, and through the active efforts of its executive officers it served as a valuable mediating agent between the Government departments and the educational institutions. In this capacity it carried on in the summer of 1918, in cooperation with the Bureau of Education, a campaign for increased enrollment in the colleges. Before the end of the summer the necessity for this campaign was removed, by the establishment of the Students' Army Training Corps on active duty status. That there was so large a number of men already registered in the colleges and ready for induction into the Students' Army Training Corps on October 1 appears to have been in great measure due to the effectiveness of this campaign.

The council set itself in the beginning to foster the development of international-educational relations. It created a standing committee to deal with this matter for American institutions. In the autumn of 1918 the universities of Great Britain, responding to an invitation of the Council of National Defense, sent a distinguished mission of university scholars to visit and confer with the officials of American universities. The council had charge of the arrangements for the entertainment of this mission. Its membership and the purposes which it sought to accomplish are mentioned below.

The passing of the war emergency brought up the question of the advisability of continuing the American Council on Education as a general agency for the unification of higher educational interests. At a meeting held in Cambridge, December, 1918, it was decided to provide for the permanent establishment of the council, with an executive office in Washington and a paid staff. Its functions were broadened to include the representation of the higher institutions of the United States in dealing with educational institutions of foreign countries, the representation of the opinions of educational interests before Congress and the Government departments, and the study of important problems in educational organization and practice. A plan of financing the council through membership fees both of the constituent associations and of individual institutions was approved. At a meeting on May 2, 1919, the organization of a permanent executive office was finally authorized.

THE BRITISH EDUCATIONAL MISSION.

In January, 1918, the commissioner for engineering and education of the Advisory Commission of the Council of National Defense issued, with the indorsement of the council and of the Commissioner

of Education, an invitation to university officers of the allied countries to send groups of representatives to America to confer with and to advise the officers of American institutions. The first nation to respond to this invitation was Great Britain. A group of scholars representing British universities landed in New York on the 8th of October. The members of the mission were as follows:

Dr. Arthur Everett Shipley, vice chancellor of the University of Cambridge.
Sir Henry Miers, vice chancellor of the University of Manchester.
Rev. Edward Mewburn Walker, librarian of Queen's College, Oxford.
Sir Henry Jones, professor of moral philosophy, University of Glasgow.
Dr. John Joly, professor of geology and mineralogy, Trinity College, Dublin.
Miss Caroline Spurgeon, professor of English literature, University of London.
Miss Rosa Sidgwick, lecturer on history, University of Birmingham.

After a visit to Washington, where they were received by the President and by the Council of National Defense, they made a tour of universities and colleges in the East and Middle West. Conferences on important aspects of the question of educational exchanges between the United States and Great Britain were held in Philadelphia, New York, Minneapolis, Houston, and Boston. Definite arrangements were made for the mutual recognition of academic credentials, and tentative plans were proposed for the interchange of students and professors.

THE AMERICAN UNIVERSITY UNION IN EUROPE.

The development of closer educational relations with the principal allied countries was promoted during the war with great effectiveness by the American University Union in Europe. At the time of the organization of the union its general purpose was stated to be:

The general object of the union shall be to meet the needs of American university and college men and their friends who are in Europe for military or other service in the cause of the Allies, and to serve as a bond between the universities of America and those of European nations especially, by encouraging in such ways as the trustees may see fit the attendance and advancing the welfare of American students at the representative universities of France, Great Britain, and Italy.

The union has been financed by contributions from colleges and universities and from private individuals. The admirable service which it has rendered, not only to members of the American Expeditionary Forces, but in the cause of international understanding, has received the highest official indorsement from France, England, and the United States. In May, 1919, the trustees of the union voted to continue the agency, with headquarters in Paris, London, and Rome.

THE INSTITUTE OF INTERNATIONAL EDUCATION.

In the spring of 1919 the Institute of International Education was established, under the Carnegie Endowment for International

Peace. The announcement issued by the institute in April contains the following statements of its purpose and the reasons for its establishment:

In order to develop mutually helpful relations between the United States and foreign countries through educational agencies, the Institute of International Education was recently founded in New York, with sufficient funds to guarantee its permanency and ability to carry out its purposes.

The need of a central clearing house of information in the field of education became more and more manifest during the war, when inquiries of all kinds came from the allied countries concerning the organization and administration of our schools and colleges, the nature of our degrees, our provision for scholarships and fellowships, the possibility of placing foreign students in our institutions, etc. Some of the definite ways in which the institute hopes to serve are as follows:

1. The preparation and dissemination of information concerning institutions, types of training, graduate instruction, and individual courses in the United States.

2. The tabulation of fellowships, scholarships, and other financial aids to students. * * *

3. The interchange of professors and other intellectual leaders.

4. Visits of foreign missions.

5. International scholarship. * * *

6. The institute will also serve as a rendezvous for foreign students and professors upon their arrival in this country, and for American professors and students before their departure to foreign counties. * * *

7. The institute is broadly educational. Though its work will chiefly be in association with educational institutions, it will cooperate with other agencies to disseminate correct information about foreign peoples. These agencies may be in the fields of science, art, finance, labor, or journalism, and the cooperation may take the form of conferences on the various aspects of international relations that have a general educational significance.

II. VOCATIONAL EDUCATION.

STATISTICAL EVIDENCE OF PROGRESS.

The second annual report of the Federal Board for Vocational Education, which has appeared during the period under review, presents the first comprehensive figures on vocational education, showing the influence of the Smith-Hughes Vocational Education Act. From this and succeeding annual reports more accurate measurements of the development of vocational education can be made than have been possible hitherto.

Prior to the enactment of the Smith-Hughes law, eight States had made some progress in the establishment of State systems of vocational education: Massachusetts, New York, New Jersey, Pennsylvania, Connecticut, Wisconsin, Indiana, and California. No figures are available giving the number of vocational schools in these States before 1918, but after deducting the number reported from these

States from the total number reported by the Federal Board, the remainder may be considered a fair indication of the extent of the development of these schools during the past two or three years. Many of these schools have been organized since August, 1917, when the board held its first conferences with representatives of the States, but the figures do not show how many.

The report[1] shows that during the fiscal year ended June 30, 1918, the total number of schools reporting Federally aided vocational instruction was 1,741, in 48 States. The number of schools reported from the eight States referred to above as having State systems of vocational education already in existence is 867. The number of schools in the remaining 40 States, therefore, was 874.

Some indication of the diffusion of the movement throughout the States is afforded by the following analysis of the figures in this table. Of the 48 States, 8 report fewer than 10 schools each, total, 47 schools; 13 States report from 10 to 19 schools each, total 173 schools; 14 States report from 20 to 28 schools each, total, 343 schools; 1 State reports 34 schools; 3 States report 45, 48, 49 schools, respectively, total 142 schools; 4 States report from 60 to 68 schools, total, 253 schools; 5 States report 71, 83, 88, 114, 393 schools, respectively, total, 749 schools.

Table 7 in the same report gives the number of pupils enrolled in the 1,741 schools reported in Table 5. In the 8 States referred to above as having State systems of vocational education already in existence, the number of pupils reported in 867 schools is 109,916, or an average of 126.8 pupils per school. In the remaining 40 States, 874 schools report 54,270 pupils, or an average of 62.1 pupils per school. In the States which have more recently established systems of vocational education the average enrollment per school is somewhat less than half that in the 8 States which have had longer experience in the work.

The problem of training teachers is recognized as very important, since 46 States report 145 training centers receiving Federal aid, with a total enrollment of 6,579 prospective teachers in training. This is a larger number than the total number of teachers now in service, 5,257 (Table 6). Only six States do not report teacher-training centers: Rhode Island, Virginia, Florida, Tennessee, Arkansas, and Iowa.

NEW WORK IN UNIVERSITIES.

For a number of years the importance of the problem of preparing vocational teachers has been recognized, and a number of institutions engaged in the preparation of teachers have made special

[1] Second Annual Report, Federal Board for Vocational Education, 1918; Table 5, p. 95.

provision for prospective teachers of trade and industrial subjects. Among the pioneers in this field were Teachers' College, Columbia University, New York City; Bradley Polytechnic Institute, Peoria, Ill.; Pratt Institute, Brooklyn, N. Y., and Stout Institute, Menomonie, Wis. The work was started also in several State normal schools and teachers' colleges, including those at Albany and Buffalo, N. Y.

In the State universities the movement began with Wisconsin, in 1910; Missouri, 1913; Indiana, 1914; Minnesota, 1915. Other institutions which have made special provision for training vocational teachers since this date include the University of California, the University of Illinois, the University of Michigan, the University of North Dakota, and the University of Cincinnati, Ohio.

EXTENSION CENTERS FOR TEACHER TRAINING.

Among the interesting developments of the work conducted by the State universities should be mentioned the branches or stations established at some distance from the main campus by institutions which do not happen to be favorably located for convenient access to the industrial centers of their respective States. One of the essential conditions of success in training teachers for the trades and industries is the provision of training facilities within reach of the industries. Employed workers constitute the chief reservoir from which must be drawn the supply of students for these classes. Experience has shown that these persons can not be induced to leave their employment and take up residence at the school; hence the school must be taken to them.

To meet this situation the University of Indiana, which is located at Bloomington, in 1918 established a teacher-training center or station at Indianapolis, and opened evening classes for persons employed during the day. The success of this center soon led to the establishment of others at Evansville, Anderson, and Richmond. Professional courses are taught by representatives of the university faculty who make weekly trips to the extension centers, and courses in related subjects are given by teachers from the local schools. In the classes in these four cities an enrollment of 136 men was reported in December, 1918. By means of this program the university meets the requirements of the State Board for Vocational Education, of 240 hours of instruction, in two years, of 30 weeks each, two evenings per week, two hours per evening.

Similar plans have been developed at the University of Missouri and the University of Illinois. The former, which is located at Columbia, has established extension centers in Kansas City and St. Louis. The latter, located at Urbana, has established a teacher-

training center in Chicago. The University of Michigan, at Ann Arbor, has opened teacher-training classes at Grand Rapids.

ASSISTANT SUPERINTENDENTS OF CITY SCHOOLS.

One of the significant phases of the progress of vocational education is the form of administration which has been adopted in a number of cities. In many cities it has been customary to provide for certain special subjects of instruction by the appointment of supervisors or directors of these subjects, reporting directly to the superintendent. Thus, supervisors or directors of manual training, home economics, art instruction, physical education, and the like, are common in city school practice.

With the development of programs for vocational education, chiefly industrial education in the beginning, it seemed appropriate to appoint directors of industrial education. For obvious reasons, numerous combination positions were created, such as director of manual training and industrial education; manual training, art, and industrial education; manual training, home economics, and industrial education.

Certain weaknesses in this plan of organization soon appeared, however: (1) In the development of a program of industrial education it is necessary to draw upon the resources and facilities of various types of school, both elementary and high, and to bring about certain readjustments and modifications in schedules, courses of study, equipment, and assignment of instructors. Efficient administration calls for the appointment of a school officer to accomplish these ends who should occupy a status somewhat different from that of the supervisor or director and should have authority to deal directly with principals of schools and other officials higher up. (2) The development of a comprehensive program of vocational education requires special training, a unique combination of experience and ability of a high order. In the larger cities, especially, it has been found difficult to secure men of the requisite qualifications at the salaries which are usually associated with positions of supervisor or director.

For these and other reasons, there have been created in a number of cities positions corresponding to that of assistant superintendent of schools, the duties of which include responsibility for the establishment and direction of vocational activities. The position is called by different names in different cities, but the ends sought appear to be substantially the same.

Among the cities which first took this step are Rochester, N. Y., and Philadelphia, Pa. In the latter the duties in question were assigned to an associate superintendent of schools. In the former, an

assistant superintendent of schools was appointed to have charge of all technical and vocational work.

In June, 1918, the New York City Board of Education adopted a by-law creating a "bureau of vocational activities, with a director responsible to the superintendent of schools." He is to have "direction and supervision of all technical, vocational, prevocational, industrial, and manual training subjects."

Boston, Mass., has an assistant superintendent of schools in charge of manual arts courses, prevocational schools, continuation schools, and vocational education. Pittsburgh, Pa., has an associate superintendent in charge of industrial education. Cleveland, Ohio, has an assistant superintendent in charge of manual training, home economics, and vocational education. Johnstown, Pa., has an assistant superintendent in charge of manual training and vocational education. It seems reasonable to expect other cities to follow these examples.

LESSONS FROM THE WAR.

It has been repeated so often that the statement is in danger of becoming commonplace and losing the force of its vital significance, but the war undoubtedly taught the American people a number of lessons on the meaning and value of education. For example:

> Nothing before in our history as a Nation has brought out into such clear relief the fact that fundamental education is a prerequisite to leadership and efficiency. Nothing before has made it so evident that, with fundamental education and physical fitness, special training may become quickly effective, and that without the fundamental education, even with the physical fitness, certain kinds of special training do not produce the desired results.[1]

Unquestionably, the success of the tremendous effort put forth by this Nation during the late struggle, unprecedented in history, must be credited in large measure to popular education. If there were respects in which the results of education did not measure up in full to the requirements of the emergency, nevertheless, we have accumulated positive evidence on the value of education to a people such as has never been available before.

It is safe to affirm that no special phase of education has more strikingly justified itself in the crisis than vocational education.

> One of the chief heritages of the war is the demonstration of the value of industrial training. The nations have paid an immense price for this lesson, but it doubtless will be counted among the most useful and salutary of all that were taught in the four years of bloodshed. . . . A very large sum of public and private funds was expended for industrial training in the United States in the last 18 months. It would be sheer waste of this money if at least the value of industrial training is not recognized.[2]

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[1] Editorial, Manual Training Magazine, November, 1918, p. 101.

[2] "Industrial Training and Foreign Trade," Training Service Section, United States Department of Labor, Washington, D. C.

THE COOPERATIVE SCHOOL.

Some attention was given in the report of the Commissioner of Education for 1918 to the importance of the cooperative school as a factor in the progress of vocational education. By cooperative school is understood a type of part-time continuation school in which, by means of a definite arrangement between the school system and one or more industrial or commercial establishments, employed workers under 16 years of age (or under 18 years) work half time for wages and attend school half time, in alternate periods.

In two cities, New York and Pittsburgh, this plan has recently been introduced on a considerable scale, and for this reason may be reviewed briefly here.

COOPERATIVE SCHOOLS IN NEW YORK CITY.

Continuation schools, as a part of the public-school system of New York City, were first established in 1913, according to plans outlined by Dean Schneider, of the University of Cincinnati, who was the first to develop in a college of engineering what is now known as the "cooperative plan." From this beginning the project has grown, until in 1918 cooperative courses were offered in 10 high schools, with 677 boys and girls enrolled, and 175 cooperating business and manufacturing firms.[1]

The students are paired, one of the pair being in school while the other is at work, and they exchange places each week. While at work the students are paid the same wages as other employees engaged in similar classes of work. "During the past year the pupils earned $105,568.13."

One of the essential features of the plan is that the activities of the students shall follow a systematic and progressive educational program while in the place of employment as well as while at school, and that the two lines of activities shall be definitely unified. In the New York City plan this is accomplished by the appointment of 12 teachers from the high-school faculties as "coordinators," working under the direction of a "chief coordinator." The coordinators seek out employers who may be induced to organize their working forces in this cooperative way; confer with foremen and other workers as to the sequence of processes in office, store, or factory; plan courses of study for the schools, making the necessary connections with the practical work; and follow up the individual student in his progress both in school and at work.

Classes are in session at various hours from 8 a. m. until 10 p. m. Some classes are housed in public-school buildings, while accommo-

[1] Report by W. H. Dooley, Manual Training Magazine, June, 1919, p. vi.

dations for others are provided by employers at their places of business.

The school authorities distinguish six different types of classes:

(1) Compulsory continuation classes for working children younger than 16 years of age who have not completed the eighth grade. These boys and girls devote four hours per week, during working hours, to general educational subjects and a choice between prevocational and vocational work.

(2) Trade extension classes for young workers in the skilled trades. The instruction includes shop mathematics, English, mechanical drawing, and technical work related to the trade.

(3) Extension classes for workers employed in commercial pursuits. These classes include salesmanship, merchandising, typewriting, stenography.

(4) General improvement classes, for younger employees in department stores and other stores.

(5) Classes in high-school subjects designed primarily for civil-service employees, for general improvement, and to assist in qualifying for promotion.

(6) Classes for non-English-speaking employees.

COOPERATIVE SCHOOLS IN PITTSBURGH.

In September, 1918, the public schools of Pittsburgh, Pa., inaugurated a plan of cooperative classes by joining in the organization of a Research Bureau for Retail Training. The other cooperating agencies are the Carnegie Institute of Technology and a number of department stores in that city. The staff of the bureau includes a director, an expert in department-store work, an expert in department-store education, an expert in salesmanship courses, a high-school principal, and advisers from the department of psychology of the institute.[1]

This staff has brought about the preparation of a one-year course of study for first-year high-school pupils, which includes English, arithmetic, general science, color and design, store organization, and practice. The student spends half-time in school and half-time in the department store, changing each week. For satisfactory work done on this basis the student receives credit for one full year of high-school work. It has been agreed that boys and girls employed in the stores under this plan are school children, not subject to discharge by the employers without concurrence of the school authorities.

Mr. Leavitt calls attention to a significant discovery made by the Pittsburgh authorities during the process of inaugurating this plan. Principals and teachers in the elementary and high schools were requested to inquire among their pupils and submit the names of those interested or likely to be interested in the proposed classes. "About 75 names of elementary-school graduates were submitted. Not one high-school principal discovered a pupil who was interested in the part-time plan." Mr. Leavitt's account continues:

[1] Leavitt. Launching Part-time Cooperative Education on a Large Scale. Proceedings, Vocational Education Association of the Middle West, January, 1919.

At the same time the stores were asked to furnish a list of positions which they would agree to fill with part-time pupils in September. The positions promised aggregated over 1,800. One store alone agreed to take 892 half-time employees, as follows: First-year high school, 84 boys and 134 girls; second-year, 46 boys and 116 girls; third-year, 112 boys and 132 girls; fourth-year, 48 boys and 78 girls; and the balance from the elementary grades. Their request, therefore was for about 85 per cent high-school pupils. The bureau investigated the educational equipment of the employees of those stores and discovered that of all these under 23 years of age only 23 per cent had ever been in a high school.

Under present conditions, therefore, positions in these stores do not appeal strongly to high-school students, and for various reasons the attempt to reach students for the proposed part-time classes through principals and teachers did not meet with great success. Subsequent efforts to get the proposition to parents and the boys and girls directly were more successful, and classes were organized.

The advantages to the student of the cooperative plan, as outlined by Mr. Leavitt, are of special interest:

1. He secures a good position since cooperative work is never undertaken by a school system unless the cooperating employer can offer a position which promises future advancement.

2. Not only does the young person secure a good position with promise of future promotion but he receives training for the work which he is doing. A part of this training is given in the place where he is employed and a part of it is given in the public school.

3. Whether at school or at work the young person is under the care and supervision of the public educational authorities.

4. The young person may begin to contribute to his own support while he is still in school securing an education.

5. To many pupils the practical work serves to explain the school work and to make it seem more vital and more important. In some cases pupils who fail to appreciate the educational opportunities offered by the regular full-time school work become at once faithful and diligent students on entering the part-time class.

6. This plan tends to hold the young person for a longer time in his first job, thus protecting him from that constant change from job to job which is so disastrous to many young people.

7. The plan will start the young worker in the right way by showing him that it is worth while to study the occupation in which he is engaged and that such a study of the opportunities of the vocation will certainly advance him in his life work. Few people are making substantial progress in their daily occupations who are not studying in some way to improve themselves and their work. It will thus be seen that the part-time cooperative plan of vocational education offers many advantages over full-time work, and even over full-time education, for some young people.

INCREASED EMPHASIS ON INDUSTRIAL ART.

No report of recent progress in vocational education would be complete without some account of the growing interest in art as applied to industries. Industrial leaders as well as educators are call-

ing attention to the urgent need for more energetic action in this direction.

Among the evidences of a lively interest in this movement may be mentioned the organization of a National Association of Decorative Arts and Industries, which occurred in New York City in November, 1918. The object of the association is declared to be the raising of national standards of taste in home furnishings. To this end it is proposed to stimulate closer relations among manufacturers, jobbers, and retailers of products that enter into the furnishing of the home. Plans include public lectures and projected exhibitions of furniture, fabrics, wall paper, rugs and carpets, framed pictures, silverware, pottery and glassware, and the like.

The Allied Wall Paper Industry has made public a call for more and better trained workers in wall-paper designing and paperhanging. This organization emphasizes the need of higher art standards in this industry in the United States, and urges immediate steps to train high grade designers. Vocational schools are asked to investigate the trade of paperhanging, and to consider the possibilities in the way of service to communities by raising the standards of workmanship.

INDUSTRIAL ART A NATIONAL ASSET.

In a brief report on this subject, H. M. Kurtzworth, director of the Grand Rapids (Mich.) School of Art and Industry, calls attention to the importance of art training in adding to the quality and quantity of the Nation's products.[1] The academic method of teaching art has proved inefficient "because it overlooks the fact that designers, artists, and artisans are essentially workmen no matter how fine their creative faculties are."

Mr. Kurtzworth argues for a more practical plan based on apprenticeship procedure which keeps constantly in touch with actual producing working conditions. The methods employed and the instruction should be such that "(1) the student thus gains definite knowledge and learns how to apply it; (2) he does actual work and gains definite skill, which will make him able to become (3) an intelligent consumer, (4) a proficient salesman, or (5) an expert skilled workman or creative designer."

PLAN FOR NATIONAL SCHOOL OF INDUSTRIAL ART.

Considerable interest has been aroused by a plan for a national school of industrial art, proposed by Prof. Charles A. Bennett.[2]

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[1] Kurtzworth. Industrial Art a National Asset. Bureau of Education, Industrial Education Circular No. 3, May, 1919, pp. 1–31.

[2] Bennett. Wanted, A National School of Industrial Art. American Magazine of Art, January, 1919.

Pointing out the need for a school to which designers and skilled workmen may go to secure the latest ideas developed in their craft and to receive instruction in the more advanced technical branches of their work, the author shows that the school must combine instruction and production in some way.

Therefore the school should consist fundamentally of a group of factories. There should be a separate factory for each of the main divisions of art industry; for example, a factory for doing work in furniture making and interior decorating, a factory for textile work, a factory for ceramics, a factory for metal working, a factory for printing and book making. Each should be a real factory turning out a limited but superior product by the best-known methods using the most up-to-date machinery where machinery is needed, and the best hand-skill methods where machinery is not available.

As the instruction should include a thorough study of the best design and technique of the past as well as of the present in the leading countries of the world, the center of the group of factories should be a working museum and library well supplied with works of industrial art that are typical and educative, and plenty of space for study and drawing in the museum building. Each factory, too, should have space for classrooms and drafting rooms. It should be possible to make a study of the technical methods as well as the finished results of the master workmen of both the past and the present. * * *

In the first place the primary purpose of the school would be education, not money making, but an important secondary purpose would be to turn out a few art products of high standard to sell on order or in the open market. Nothing should be sold that would not be a credit to the school from the standpoint of design as well as workmanship. No factory run for the primary purpose of instruction should be expected to pay the salaries of teachers out of receipts for products manufactured. Such perpetual-motion schemes of education have been tried and always failed, either educationally or financially or both. On the other hand, several instances can be cited where a school factory has more than paid for the cost of stock and supplies consumed in giving high grade instruction. It should be noted that in this respect the school factory of the type under consideration has a very distinct financial advantage over most scientific laboratories, although these are cheerfully maintained at a great expense because of the large returns in scientific knowledge.

In conclusion, the author shows that such a school, though it may have branches in various parts of the country, or to deal with various specific industries, must be developed on a national scale and with national support in order adequately to meet the needs of the situation.

The Art Alliance of America, with headquarters in New York City and branches in other cities, has been a potent force in centering public attention on industrial art and in urging the necessity for aggressive national action. During the month of April, 1919, the alliance held in New York City an exhibit of the work of students from more than 20 schools offering instruction in fine and industrial art and the skilled trades. The exhibition included the following sections: Graphic arts, fashions, textiles, interior decoration, stage craft, and toys.

The Art Alliance of Chicago held an industrial art exposition in Chicago in May, 1919, in cooperation with the Illinois Manufacturers' Association. An attempt was made to secure displays from all industries in which art plays a part.

An important meeting was held at the Metropolitan Museum of Art, New York City, on February 11, 1919, to discuss the "National needs and opportunities in the industrial arts." Cooperating in this meeting were the Art Alliance of America, the Municipal Art Society of New York City, the Art in Trade Club, the School Art League, and the Art Department of the city high schools.

At the twenty-fifth annual convention of the Western Drawing and Manual Training Association, held at the Chicago Art Institute, May 6–8, 1919, one entire session was devoted to a discussion of "A National Policy on Art in Industry." The program included two formal proposals of definite plans for the establishment of a national institution to deal with this situation: (1) "A National University of the Arts," by Miss Emma M. Church, president, the Church School of Art, Chicago; and (2) "A Plan for a National School of Industrial Art," by Prof. Charles A. Bennett, editor, the Manual Training Magazine.

These events, and others which might be noted, seem to justify the expectation that through some form of cooperative effort, and at an early date, steps will be taken to meet what is clearly a very real national need.

VOCATIONAL REHABILITATION UNDER THE SMITH-SEARS LAW.

The President's veto of the sundry civil bill, and subsequent action by Congress have resulted in an increase of the fund available under the Smith-Sears law from $6,000,000 to $14,000,000. Further changes in the law affecting the relations of the Federal board to the Bureau of War Risk Insurance have simplified the administration by relieving the bureau of responsibility for certain details, and centralizing the administration in the Federal board. The new arrangement makes for more effective and expeditious procedure.

On August 1, 1919, the Federal board had in training over 6,000 returned soldiers, sailors, and marines, in about 1,000 institutions, including schools, colleges, universities, factories, farms, and offices. Men are entering upon this training at the rate of over 1,000 per month.

More than 147,000 men have been registered and given their medical examinations, upon application for vocational rehabilitation; more than 100,000 cases have been surveyed by representatives of the Federal board; and over 14,000 cases have been approved for training.

ACTIVITIES OF ORGANIZATIONS INTERESTED IN VOCATIONAL EDUCATION.

The annual conventions of educational organizations especially interested in vocational education constitute an important factor in the progress of the movement. The fifth convention of the Vocational Education Association of the Middle West was held in Chicago January 16–18, and the attendance was reported to be larger, and the interest greater, than at any previous meeting. The same may be said for the twelfth annual convention of the National Society for Vocational Education, which was held in St. Louis, February 20–22. These two associations have announced their intention to combine in a joint meeting in Chicago, February 19–21, 1920, in what will probably be the largest and most important convention thus far held in the interests of vocational education.

III. HOME ECONOMICS EDUCATION.

Home economics education during the fiscal year 1918–19 was sharply divided into two periods. The first lasted through the summer of 1918 and until about January 1, 1919. The second completed the year to June 30, 1919.

During the first period all class work was dominated by war needs until influenza became epidemic, after which community service was the controlling motive in home economics class work. During the second part of the year, there was a tendency toward retardation of war-work instruction, a little slackening of energies, a searching for subjects of such commanding importance that motives for sustained interest might be provided and that the impetus supplied by the war period might not be lost, and an effort to readjust to a normal basis that should retain all good gained during the unsettled period of war activities as well as that of the previous years of careful development and growth.

SUMMER SCHOOLS.

War emergency courses occupied most of the time in the summer schools of home economics in 1918. These courses were given as preparation for teaching classes in Red Cross sewing, for the preparation of canteen workers, and for intensive courses in dietetics for graduate students who were anticipating employment as war hospital dieticians. In addition, courses of instruction were offered along certain specialized home economics lines, for those wishing to enter hospitals as assistants in vocational therapy.

CREDIT TOWARD NURSES' CERTIFICATES.

Early in the fall of 1918 the War Department accredited the home economics work in certain colleges and universities toward the nurse training certificates from Army hospitals. The home economics graduates were relieved of nine months of the required three years' training period.

EMERGENCY WORK.

During the pandemic of influenza, when schools were generally closed and public meetings prohibited, the home economics teachers and home economics county agents assumed the responsibility for the preparation of the food which was distributed to the sick and to families needing relief.

In many institutions in which there was a large number of men in the Student Army Training Corps, the students in home economics prepared all food served to the sick during the epidemic, while a number of the instructors volunteered into the emergency hospitals. An illustration of this was the work done at the Ohio State University, where equipment was moved from the home economics department to the kitchen of the college emergency hospital and all food preparation was in charge of home economics women.

AFTER-EFFECTS OF WAR-EMERGENCY WORK.

In colleges, as a result of the stimulus, much more effective courses in dietetics were organized; an unusually large group of students became interested in the management of cafeterias, lunch rooms, and institutions of various types; and students of scientific temperament interested themselves in graduate courses in food investigations and experiments.

Extended and improved courses in child welfare were established as a result of the increased national interest in the care and development of the Nation's children. An innovation worthy of imitation is that of training in child welfare by the practical care of needy children as illustrated by the following:

> In the University of Minnesota an interesting addition has been made to the list of activities which can be carried on in a practice house devoted to teaching the varied activities of home making.
>
> There are in operation at this institution two practice houses. In one house a baby 14 months old, and in the other house a 21-months-old baby is living, affording the girls an opportunity to observe as well as to assist in their care. The babies were secured from the local orphans' home.

Two courses of importance in child welfare study have been suggested for the use of colleges. One, prepared under the direction of the Children's Bureau of the Department of Labor stresses prenatal

influences, infant care, and the effect of unsuitable occupations and environment upon the physical welfare of children; the other, suggested by an authority upon child training, places emphasis on the need for trained parenthood and rational direction of education in schools. The latter considers the mental and moral development of children, touching but lightly upon the physical care.

It is expected that the home economics teachers in city schools will aid in the efforts now making to Americanize the foreign home, a need that was not fully recognized until the war period.

In order to understand the foreign home maker, it is essential that the teacher be familiar with old-country customs and traditions, and the standards of living maintained in the parent country, and also to know the environment of the old country home. The course in methods of Americanization outlined by Miss Breckenridge, chief of the division of adjustment of homes and family life in the study of methods of Americanization, is of unusual value in preparing home economics students for teaching the children and the mothers in the foreign sections of the larger cities; in aiding the home economics county agents who serve in rural districts having a large foreign population: and in training the visiting housekeeper and the public health nurse.

TEACHER TRAINING IN VOCATIONAL HOME ECONOMICS.

Special courses were established in State institutions for the preparation of vocational home economics teachers. These courses were determined by the Federal Board for Vocational Education. Generally but one institution in a State has been selected to administer the work. Usually a land-grant college or the State university has been selected, though in some States, the State normal school is to receive the Federal funds allotted for teacher training.

The Smith-Hughes Act, which made possible the supervision of vocational home economics instruction in secondary schools, has resulted in securing to the vocational schools 47 home economics supervisors. In some States the college teacher of vocational home economics is also the State supervisor, thus linking closely the college and the vocational school. The one in charge trains prospective teachers for this special type of school work and also trains the teacher who is now employed that she may become more effective in her work. There can be no question that there are many advantages from this arrangement. Familiarity of the college teacher with the problems of the secondary school will react favorably upon her teaching in the college classroom.

In certain States the supervisor of Smith-Hughes vocational home economics gives all of her time to the supervision of instruction in

the secondary schools. In a few States home economics supervision is by a man who is State director of all vocational work.

EXPANSION OF HOME ECONOMICS TEACHING.

In January the trustees of the $3,000,000 fund bequeathed by Mrs. Palmer for the establishment and maintainance of a school of motherhood and home-making in Detroit, Mich., began the formulation of plans for the school. An advisory committee of Detroit women was appointed to assist the trustees. Conferences were held in Detroit with home economics women, and plans were completed for the employment of one woman to study for a year or more the local needs and conditions, and after this study, to organize the active school.

Courses in home economics were established at Massachusetts Agricultural College, Amherst, Mass.; in the Agricultural College of Georgia, at Athens, Ga.; at the University of Mississippi, and at the University of Alabama during the year of 1918. Summer courses in home economics had previously been offered at these institutions.

Indiana University. A unique course for teachers was given in the home economics department during the summer on how to present to school children the subject of "How to spend money." This course was in charge of Helen C. Goodspeed, State superintendent of home economics for Wisconsin. A demonstration class was arranged in connection with this course.

The home economics division of Iowa State College recently received from the estate of Mary F. Rausch a fund of $500 to be known as the "Mary F. Rausch Memorial Fund." The income of this fund will be used as an annual prize for junior students, awarded on the basis of ability, scholarly attainment, character, and interest in affairs which are worthy the attention of students who are preparing themselves for efficient service in home economics work. The prize this year was awarded to Frances Newell, of Columbus Junction, Iowa.

HOME ECONOMICS IN EDUCATIONAL SURVEYS.

In the "Educational Study of Alabama" special recommendations were made relating to home economics teacher training at the Alabama Polytechnic Institute at Auburn under the Smith-Hughes Act. This is particularly interesting because, up to the present time, the Alabama Polytechnic Institute has given scant attention to the educational needs of the women of Alabama.

It [the survey committee] advises the establishment of a well-equipped division of home economics at the Alabama Polytechnic Institute and the transfer to that institution of all the Smith-Lever extension work in home economics and the Smith-Hughes work in the training of home economics teachers. A necessary corollary is the provision of dormitories or adequately supervised residence houses for women in Auburn. In effect, then, the Alabama Polytechnic Institute would become what the land-grant colleges of most other States already are, the professional college for women in the science relating to

agriculture and home making. This provision, if adopted, would entail the expansion of the work of the school of agricultural education of the Alabama Polytechnic Institute to cover the training of teachers in home economics. It would also reinforce the program of that school for the training of rural life leaders of both sexes.

Under the General Education Board a special study of the teaching of home economics in the Gary schools was made, and a report entitled "Household Arts" by Eva W. White has been issued.

In this, the following pronouncement appears:

In sewing, as in cooking, the experience of Gary shows that mere practical ends, the cooking of the daily school luncheon or the making of needed garments, are not alone broadly or sufficiently educative.

Training should aim to give the pupil an intelligent grasp of both subjects. The child must of course be able to cut, fit, and sew; but she must also have an interest in fabrics, designs, uses, etc. The instruction must have a conscious, central aim; it must touch, now here, now there, the child's other studies and activities.

HOME ECONOMICS IN FOREIGN COUNTRIES.

A department of Household Economics was organized at the University of Alberta, Edmonton, Canada, in 1918. The work is in charge of Miss Mabel Patrick, an honors graduate in household economics of the University of Toronto.

An American woman, Mrs. Strong, of the University of Cincinnati, was called to India to establish a school of home economics for native girls. This school has now issued an announcement of purposes, plans, and courses, entitled "Household Arts in Baroda College." The course is in all respects worthy of the best traditions of American home economics.

CHANGES OF PERSONNEL.

Twenty-three changes in the heads of the departments of home economics in land-grant colleges and State universities have occurred since the last report. The demand for trained and experienced home economics women in Government activities called away many of the leading home economics women; some have shifted from one institution to another; four changes resulted from establishment of new departments in State universities; and the higher remuneration for trained women offered by commercial organizations has contributed to the unsettled condition.

PUBLIC SCHOOLS.

In the public schools, war needs modified the class work and theory in both clothing and foods. Fewer artificial and more genuine needs were recognized. Besides the sewing for the Red Cross and for charity organizations, many valuable garments were made from old material.

The evidence the public school children gave of being able to work rapidly and well when employed on patriotic projects has resulted in much more effective courses. One teacher states that "fifth grade students are now doing better and more expeditious work than was formerly required of eighth grade pupils."

IV. COMMUNITY ORGANIZATION.

The historically important development in community organization, which marks the year July 1, 1918, to June 30, 1919, is the beginning, accomplished during these 12 months, of the establishment of public-school community centers as stations of the Nation-integrating and world-uniting postal service.

At the time of the entrance of the United States into the war we were in the tenth year since the starting, at Rochester, N. Y., July 1, 1907, of the spread of conscious efforts to make available the resources of practical advantage which inhere in the completed community use of our public-school buildings and grounds. That start had been signalized by the declaration of Gov. Charles E. Hughes: "I am more interested in what you are doing and what it stands for than in anything else in the world. You are buttressing the foundations of democracy."

There had followed a widening recognition that civic efficiency, liberating economy, increased joy in life are at hand in the rightly organized use of this ready neighborhood equipment; and a beginning of perception that the finding of these values presents a technical problem of procedure; that, as President Wilson phrased it, "We must study the means by which these things are produced."

THE INDICATED WAY PERCEIVED.

Back there, at the inauguration of this movement as a consciously sought development, had been written these words in description of the community center:

It is not to take the place of any existing institution; it is not to be a charitable medium for the service particularly of the poor; it is not to be a new kind of evening school; it is not to take the place of any church or other institution of moral uplift; it is not to serve simply as an "improvement association" in which the people of a restricted community seek only the welfare of their local district; it is not to be a "civic reform" organization, pledged to some change in city or State or National administration. It is just to be the restoration to its true place in social life of that most American of all institutions, the public-school center, in order that through the extended use of the common-school equipment may be developed, in the midst of our complex life, the community interest, the neighborly spirit, the democracy that we knew before we came to the city.

That pioneer neighborhood institution of a half century ago, to the perpetuation of whose spirit and the fulfillment of whose promise the modern community center movement was thus dedicated, would never have begotten its inspiring tradition if those gatherings in the schoolhouse of the early days—those lyceums, debates, spell-downs, singing schools—had been matters of arrangement by some privately constituted "outside" organization to "Americanize" or "socialize" the men and women of the neighborhood; or if the funds required had been privately derived so as to give to these uses the character of a charity; or if the administration of the activities had been in the hands of privately paid and privately directed "social workers."

The old-time rural schoolhouse in its community uses would not have caused itself to be remembered as "that most American of all institutions" if behind and above those lighter recreational expressions of the neighborhood spirit there had not been as the essential framework of the institution's control a definite reality of democratic organization. It was the district school meeting and the opportunity which that regularly constituted community association gave for all the adult citizens residing in the neighborhood directly to participate in exercising rightful authority over the uses to be made of the building in their midst that gave to the institution its germinal significance and integrity as the social creation of a free people.

The way of procedure was thus found in the perception that the essential provisions for community center development are those which had been simply and practically embodied in our original and distinctively American form of community organization, the district school meeting.

UNIFIED ORGANIZATION POSSIBLE.

In the years from 1907 to 1917 the experience gained throughout the country had clearly shown that the policy of allowing the public school buildings to be used, under board of education permission, by partisan, sectarian, or other privately formed organizations—whatever their purposes and aims—tends not to strengthen but to weaken the community sense of responsibility; makes of the potential community center an actual disunity center; threatens always to produce misunderstanding and friction, if not worse disorder.

On the other hand, this experience had shown no less clearly that we of to-day, whatever our neighborhood—urban, village, rural—may be counted upon to make appropriate and beneficial use of our local schoolhouse provided our proper right, when duly organized as one all-inclusive community association, to use this community building for fair discussion of public questions and cooperation in the common interest is legally recognized as the right of neighbor-

ing citizens to assemble for conference and cooperation in district school meeting was recognized; provided there is regularly furnished from public funds the necessary money to pay the incidental expenses of this assembly, as such provision was made for the coming together of citizens in district school meeting; and provided due recognition is publicly afforded for the office and for the compensation of the community secretary, just as public recognition and compensation were afforded to the clerk of the district school meeting. And this experience had indicated that only with such all-uniting and responsible neighborhood organization of the adult citizenship accomplished first of all may the free-time uses of the school building for meetings of young people and for special group activities consistently be developed.

RESULTS OF GENERAL EXPERIENCE PRESENTED.

From the time of the establishment, in the Bureau of Education, of the Division of Community Organization, January, 1916, this bureau had steadily recommended the procedure which the experience of these years throughout the country had indicated as necessary in order that the community usefulness of the common school equipment may be realized.

Indications had begun to appear that the essential principles of this development were coming generally to be seen. For example, a gathering of students of community organization, coming together in New York City from all parts of the country, had unanimously recognized and declared to be fundamental the following basic propositions:

Public buildings should be available for use by the people as a right instead of a permission.

Tax money should be used in the development and maintenance of community centers.

Community centers should be administered through responsible public officials.

WAR EMERGENCY EMPHASIZES NEED.

However, just as the outbreak of the war showed that there had not been throughout the world a sufficient appreciation of necessity of applying the essential principles of rightful community organization in the development of an adequate institution of international adjustment, so our mode of responding to the emergency demand demonstrated that we had not as yet generally enough come to perceive the procedure by which this may be accomplished. Notwithstanding the lessons of common experience which had shown that the policy of permitting the use of the public-school buildings under the auspices of privately formed organizations is contrary to effective development of the larger usefulness of this equipment, it was precisely this policy which almost everywhere throughout the country

began to be put into operation in response to the civic mobilization demand.

Instead of the necessary provision that the membership of each local community might make use of the public-school facilities for self-organized conference and cooperation such as would assure most effective dealing with all of the problems and demands of the emergency, many volunteer organizations were formed in response to special needs and sought, in conflict with each other, the use of the local public-school equipment for meetings or the conduct of other activities. By March, 1918, the situation had developed to the point where the President called attention to the necessity of "a fusion of energies now too much scattered and at times somewhat confused." And by the 1st of July, the opening of the period with which this report deals, the necessity of systematic procedure for effective community center development, as well as the vital importance of this unifying organization, had been brought home to thoughtful men and women everywhere throughout the Nation.

COMMUNITY ORGANIZATION FOR INDUSTRIAL ADJUSTMENT.

In no industrial center in the United States, during all the period of the war, had the economic conflict become more acute than in Bridgeport, Conn. Starting as a controversy which concerned only the machinists, the struggle had come to involve a large part of the whole population, constituting in the words of the War Labor Board's official statement, "the case of the employees versus the employers in the city of Bridgeport." The award of the War Labor Board included the following provision: "The right of the employees to bargain collectively is recognized by the National War Labor Board."

The only housing that would serve for the coming together of the whole body of employees to exercise the right thus recognized was the equipment of public-school buildings.

The board of education recognized the right of the citizens of the several local districts of Bridgeport to assemble for organized conference and cooperation in their respective school buildings, and afforded out of public funds the necessary money to pay the incidental expenses of such assembly, and the War Labor Board furnished out of the public funds appropriated for its work a due proportion of the compensation of the local community secretaries chosen, not by the employees alone nor by the employers alone, but by the whole body of the citizens organized as one community association in each school district. The community secretary was responsible under this all-inclusive community association for supervision of the special group uses of the local school building.

After the signing of the armistice, the National War Labor Board withdrew from participation in the compensation for community sec-

retarial service, and neither the State of Connecticut nor the city of Bridgeport made public provision for this essential of consistent community center development, so that only a beginning of this development was possible. But there were no incidents of disorder in the uses that were made of the school buildings, despite the intensity of hostile feeling that prevailed throughout the city, and a fundamentally important demonstration was made that when adequate and permanent provision is made for the use of the public-school buildings in accordance with the essential principles of the district school meeting, the instrumentality is secured for dealing democratically and rationally with the problems of industrial adjustment, by means of debate instead of dynamite.

COMMUNITY CENTER POSTAL SERVICE COORDINATION BEGUN.

Not at Bridgeport, however, but within and out from the District of Columbia has gone forward the chief demonstration of services in community organization.

Congress appropriated the necessary funds, and the board of education adopted the policy of recognizing the proper right of the citizens of each neighborhood, when duly organized as one all-inclusive community association, to use their local school building for untrammeled discussion of public questions and cooperation in the common interest. Consistent beginnings of community center development had been made during the year 1917–18, first in the Park View neighborhood and then in 15 other sections of the District; the principal activities carried on being, of course, emergency war services, as the national need required.

The occasion of the first community center postal service coordination, for which that year's development had prepared the way, is thus stated in the report of the board of education:

> The post-office adjustment—the first of its kind to be accomplished anywhere in the United States—appears at first glance to be merely a matter of economy and convenience whose virtue is in its practical service character. But the fact is that it was the effort effectively to develop the possibilities of the public schoolhouse as the community's center of cooperation in national service activities and the discovery that the post office is the medium upon which the National Administration is chiefly depending for the organized war-service cooperation of the citizens, which led the people of Park View to see the logic of this combination. There was in the motive that lay behind this movement the thought of convenience to the people as private individuals, but the dominant thought was of their more direct and effective national service as citizens that would be made possible if the schoolhouse were at once the center of local community expression and of direct, official communication with the National Government.

The postal station installed in the Park View schoolhouse was opened on July 1, 1918, its administration being included as a part of the service of the locally elected community secretary. Along

with the other uses of the postal facilities which started at once the people of Park View soon evinced the desire to cooperate in the effort which the Post Office Department is making, as directed by Congress, to improve the service of the parcels post as a medium of direct transmission of food supplies from rural producers to city consumers. In November the Fourth Assistant Postmaster General, who has charge of this effort of the Post Office Department, examined the organization at Park View. He at once perceived that this use of the community center as the postal station and this service of the community secretary as the postal agent furnishes a simple and trustworthy agency for receiving and distributing commodities.

The understanding was reached that the person chosen by the citizens of the neighborhood to serve as their community secretary should be appointed and duly compensated by the Post Office Department for service as postal agent. The opportunity was at once presented to the citizens of Mount Joy Township, a rural community in southern Pennsylvania, and adopted by them. These citizens unanimously chose the school principal, A. Nevin Sponseller, as community secretary. He was thereupon appointed as postal agent; being the first person to combine these correlative forms of public service in any community in the United States. Following the inauguration of this development in Mount Joy Township, beginnings of similar organization were soon effected in several rural communities in Maryland. Direct inter-community connection was established between the residents of these rural neighborhoods and the residents of the city community of Park View, not only through the shipment of commodities, but also through interchange of visits and other communications, which indicate that the perfecting of this integrating development will bring about the breaking down of the barrier between city and country neighbors, a broadening of acquaintance and a vitalizing of the sense of American unity and fellowship between citizens heretofore unacquainted.

It is obvious that there is no development of practical educational coordination more fundamentally important than this combining of our common institutions of neighborhood and of world-wide communication—the public school and the postal service. In order that this development may proceed consistently, it is apparent from the experience thus far gained that the local organization in the city, community, and the country community alike must embody first and always the essentially democratic principles of "that most American of all institutions"—the district school meeting.

In the meantime interest in community organization for the primary purposes of acquaintance, instruction, discussion, and cooperation has grown rapidly. The conception of the school district community, the final unit in the larger democracies of State and Nation,

as a little democracy and the schoolhouse as its capital is becoming more familiar to the people of city, town, and country. It is beginning to be seen that the intelligence and power of the larger units depend upon the intelligence and responsiveness of these little communities; that it is of the very essence of democracy that it is and must be alive and intelligent in all its parts, with the power of initiative and the capacity of sound judgment on all matters pertaining to the vital interests of local community, municipality, county, State, and Nation.

The need for some kind of community organization was keenly felt during the war, and the National Council of Defense and other bodies that, for the success of their work, had to reach the people quickly with information and get from them quick responses undertook to form community organizations on a large scale. Unfortunately, the exigencies of the war required such sudden and wholesale organization that it became necessary to work from the top downward in a somewhat autocratic way, rather than from below upward in a slower, more democratic, and more permanent way. Because of this urgency, it was found to be necessary to bring people together as classes rather than as individuals on the broad foundations of humanity and citizenship. It is, of course, not desirable that such a principle, which if continued upward to municipality, State, and Nation, would inevitably destroy our democracy and institute class government, or at least class struggle and balancing, for government of representation by all the people should be continued. It is no doubt fortunate, therefore, that community organizations thus founded are rapidly disintegrating.

But the power of community organization has been demonstrated on a large scale, and it is believed that the promotion of the more legitimate and democratic community organization will go forward much more rapidly than would have been possible but for the emergency organizations just referred to.

V. AMERICANIZATION.

A number of factors have served to create the present Nation-wide interest in Americanization. Each community remembers distinctly the difficulty with which it carried the story of America's purpose and America's need to large groups of foreign born residing within that community. The plans of the draft, of the liberty loans, of the food regulations, of coal saving, and of the work of the Red Cross were carried to the foreign born in our communities only with great difficulty. Until that time communities as a rule had not realized that large numbers of people were living within their borders who

were not of the community and were not citizens in any sense of the word.

The census of 10 years ago had shown that, even according to the superficial and insufficient test of the census taker, nearly one-tenth of our people were illiterate in the language of this country. These figures, astounding as they were, made no general impression. We assumed that everything was coming out all right. We had heard about "the melting pot," and the idea had pleased us. We were as a matter of fact proud of the way 60 different races of people were growing into one homogeneous nation. Then suddenly the war came, and to to the astonishment of all, our "homogeneous" people seemed suddenly to spring back into its component parts. To our dismay we found millions of our people thinking as Italians and Poles and Hungarians and Germans, rather than as Americans. We were chagrined to discover that the "melting pot" had existed largely in our fancy only.

Came then the draft army with its impartial toll upon the young men of the Nation. Immediately other long-cherished illusions began to fall. We had been so proud of "the little red schoolhouse." We had thought of America as the country where education was free to all, and except for an unambitious few peopled by men and women who were an example to the world as models of literacy. Education had of course been left to the States, and while we had known that in many States there were no effective school-attendance laws, and that in many of the States the attendance laws were not well enforced, that school terms were short in the country districts of many States, and that many teachers were poorly prepared for their work and lacked even a high-school education; yet we smiled complacently and went on admiring ourselves fatuously for our educational accomplishments.

Rumors then began to reach us of large numbers of the drafted men who were unable to understand the orders given by their officers, who had no knowledge of the reason or purpose of the war, and whom it was impossible to train with the other soldiers. We learned that in one camp alone it was necessary to converse with the men through interpreters in 40 different languages. We found that men who were physically fit and were needed in that thin fighting line in France as men were never needed before in the history of the world must be thrown to one side until they could be given the rudiments of an English education.

Still the Nation did not realize nor appreciate the magnitude of its own neglect until the Surgeon General of the Army submitted a report showing the illiteracy in the draft camps. It was almost impossible to credit the figures of that report, for of 1,552,256 men examined, 386,196 had been unable to read and understand news-

papers, and to write letters home. The figures, however, were conclusive. Tests had been applied to the men of all the camps, and in the 28 camps the number of illiterates varied from 13.5 to 41.8 per cent, with an average in all camps of 24.9 per cent. The tests had varied somewhat in the different camps, but in none of them was the test more than a 10-year-old boy should have passed without difficulty. Yet of all those fine young men, one out of every four was illiterate to the extent of being unable to read a newspaper or write a letter.

The census enumerators have no opportunity for making a test. They merely ask the question "Can you read and write?" and enter a man as literate or illiterate according to his reply. This is clearly an insufficient test. Common pride would lead a man to claim literacy, and those who could merely scratch their names would thus be entered as able to read and write. Yet according to this test the census had shown 5,500,000 people who were confessedly illiterate. It is little wonder that an actual examination of the individual demonstrated the existence of illiterates upon a scale far beyond that indicated by the census.

When the figures of the Surgeon General were given to the public, people began to ponder them carefully. "If," they reasoned, "there are 24.9 per cent of the men between 21 and 31 illiterate, what can the total in the whole country be?" Such men are presumably most recently out of school, and illiteracy should be less between those ages than between any other adult years. If the percentage is one to four in our best class, what would be the grand total of all our people unable to read and write. Any such percentage as that shown among the drafted men would give a total greater than we had been accustomed to consider in this connection. Yet we dare not hope that the percentage can be less.

All these factors brought the need for Americanization urgently before the American people, and organizations and communities everywhere began to study the problem. The out-of-date census figures were brought forth and received a new attention. It was surprising to note that the total number of native illiterates and non-English speaking, foreign born people had, even back in 1910, exceeded all of the people of the Dominion of Canada; that they were greater in number than all of the children of school age in 32 of our 48 States; that they were greater in number than the people then living in all the cities of the United States west of the Mississippi River except one; that they outnumbered the people of our three great metropolitan cities: Greater New York, Philadelphia, and Chicago; that they could alone people all the following States: Nevada, Wyoming, Delaware, Arizona, Idaho, Vermont, Rhode Island,

North Dakota, South Dakota, Oregon, Maine, Florida, Connecticut, and Washington. And all illiterate in the language of America!

A number of societies had been for years trying to awaken the Nation to this situation without much success, but suddenly it awakened and there began everywhere definite efforts toward meeting the problem. The State of New York, which had been directing the education of its immigrant people in a small way, passed laws increasing the appropriation for such work and creating a definite organization to undertake it on a broader scale. The States of Rhode Island, Connecticut, New Hampshire, Pennsylvania, Michigan, South Dakota, Ohio, and others made appropriations for similar purposes and either created new bureaus or commissions to take charge of the work or placed it definitely within the jurisdiction of their State departments of education.

The national conventions of many organizations for 1919 made Americanization their principal topic of study; and such associations as the General Federation of Women's Clubs, the Daughters of the American Revolution, and the Women's Christian Temperance Union made the problem their principal undertaking for the coming year. Several organizations undertook to print and distribute helpful booklets for the use of interested workers, notably the National Security League, the Sons of the American Revolution, the National Catholic War Council, and others. The Young Men's Christian Association, and the Young Women's Christian Association, which had been carrying out definite Americanization programs for a number of years, broadened their work materially through their war funds. Several of the great churches raised reconstruction funds, of which a large part is to be expended in Americanization. Other religious bodies, including Jewish, are carrying on similar work with their own people.

The racial organizations have in a number of instances offered their cooperation in any definite Americanization program. The foreign-language press has sought to assist the committees in the various communities in getting the story of the work before the foreign born. The organizations of the foreign born created for work during the Liberty loan and other war campaigns, have in several instances swung over into Americanization fields. The committees of the Council of National Defense, notably the women's committees, have set forth upon definite programs.

The country is now fully aroused to the need for Americanization and for the sympathetic assimilation of our foreign-born people, their protection from unfavorable environment, and their education in English and the ideals of America. Little propaganda is needed except here and there with a still backward community. The great need now is for the proper organization and direction of the forces

which have been aroused. The problem is too delicate to be left to the uncertain activities of undirected amateurs. There should be immediate national organization of all forces under the leadership of the Federal Government. There should be a definite, concrete, and practical National-State-community program. There should be a painstaking study of methods and materials which can help in the purposes of the work.

The Nation, in short, should be organized for work in this great, pressing, human problem exactly as it was for the problems of food conservation and for the mercy tasks of war.

VI. THE AWAKENED INTEREST IN CIVIC EDUCATION.

In the Report of the Commissioner of Education for the year ending June 30, 1914 (one month before the outbreak of the World War), was a chapter on "The Trend of Civic Education," in which it was said:

> Civic education has seemed to many to be a very indefinite thing, with little that is tangible about it, or else a very particular thing of narrow application and of little general interest. Vocational education makes a strong appeal to the business man, because he can see it in terms of efficiency among his employees, or in terms of ability on the part of the boy to find and hold a job. * * * It has not been so with civic education.

In the same chapter it was urged that the rapid multiplication of devices for the popular control of government—the direct primary, the extension of the suffrage, the initiative and referendum, and many others—would avail little for the accomplishment of their ends, either of "efficiency" or of "democracy," unless their foundation was "laid deep with an effective civic education."

For some years prior to the war protests had been heard against the inadequate and ineffective provision made for the training of American citizens for the responsibilities of citizenship. Interest was increasing in "a civic education with a new content, a new aim, and new methods": and in an encouraging number of instances reorganization of effort in this direction was taking place.

This interest, however, was sporadic. Those who took the matter seriously were often depressed by apathy in regard to it on the part of the public and of school authorities. Everyone was ready enough to concede in the abstract the importance of "training for citizenship," and here and there voices arose in criticism of the schools for not doing more about it. But for the most part the question was treated as an academic one, and interest was perfunctory. Public opinion was not aroused to the necessities of the case to the same extent, or for the same practical reasons, that it had been aroused, even before the war, to the claims of vocational education.

The war has wrought a change in all this, as it has in many other things, as, for example, in causing us to take seriously the Nation's responsibility for health conservation and health education, and in giving new national significance to vocational training. In fact, it is the civic necessities that have created the new demands for physical and technical training. Educators, business men, Government authorities, and, to a considerable extent, the public generally have come to look upon civic education as a more "practical" proposition.

Writing during the war to the president of the board of education of Great Britain with regard to the English situation, Mr. Henry Arthur Jones said:

> Why did we not set about instructing our boys in their primary duty of defending their country in 1890 instead of in 1914? In those years we had in our hands the instruments of deliverance from the worst of our present losses and calamities, if we had but perceived the truth of this first principle of national education which I am affirming. But that truth had lain so long neglected in the national soul that it had become bedridden. * * *
>
> Our politicians went their way, managing our great Empire as a factory for turning out social reforms at the shortest possible notice. * * * All of the social reform legislation of the years before the war was of small importance or value compared with the necessity for preparing our citizens to defend their country. * * *
>
> What part and influence had popular education in shaping the mold of political thought and cutting the main channels of political action? For though it is plain, sir, that you can not issue a set of political opinions to your scholars, I am sure you would agree that the general policy of your office, its main principles and aims, must largely determine the political bias of the next generation, must prompt certain political impulses, and give direction to much of our forthcoming legislation. Indeed, I suppose you would claim that it is one of the chief objects of popular education to train a future electorate to demand a wise legislation.

In the summer of 1917, in connection with the mobilization of the resources of the Nation for war, President Wilson addressed a message to the school officers of the land in which he said:

> These and other lessons of the war must be learned quickly if we are intelligently and successfully to defend our institutions. When the war is over we must apply the wisdom which we have acquired in purging and ennobling the life of the world.
>
> In these vital tasks of acquiring a broader view of human possibilities the common school must have a large part. I urge that teachers and other school officers increase materially the time and attention devoted to instruction bearing directly on the problems of community and national life.
>
> Such a plea is in no way foreign to the spirit of American public education or of existing practices. Nor is it a plea for a temporary enlargement of the school program appropriate merely to the period of the war. It is a plea for a realization in public education of the new emphasis which the war has given to the ideals of democracy and to the broader conceptions of national life.

Never before has there been anything like the interest in civic education manifested by the schools since we entered the war. The sec-

retary of the National Security League's committee on citizenship in elementary schools states that in a single year she received and answered 6,000 direct inquiries from teachers relating to the problems of teaching civics; and this organization is only one of a multitude of agencies, public and private, that have been performing a similar service. This interest had its origin, naturally enough, in the desire of pupils and teachers to keep abreast of the stirring events of the war. The simple study of current events was quickly extended to consideration of the ideals and institutions for which we fought, of the problems which our Government and the Nation faced, and of the methods by which the problems were met. Government and voluntary patriotic organizations stimulated the study and the participation of the children in conservation and thrift, in Red Cross work, and in gardening. The discovery was made that the service of the millions of young citizens contributed materially to the success of the national enterprise, and that the children were an effective channel through which to expand the public intelligence regarding the issues of the war and to stimulate the national morale. Incidentally, the children, their teachers, and their parents were acquiring a civic education of the most vital kind.

Although the emergency which led the Government to appeal to the schools as a war measure has disappeared, the interest in civic education yet shows no signs of abating. Legislation has been enacted in a few States, as in New Jersey, and is contemplated in others, as in Ohio, to place civic education on a more definite and effective basis. Courses of study are being revised to make place for civics instruction. Thousands of inquiries are coming in to the various appropriate agencies, not only from teachers and school administrators but also from legislative committees, chambers of commerce, women's clubs, and civic organizations, seeking advice as to the best means of making civic education an effective part of the school work. This interest is not limited to the public schools, but includes hundreds of parochial schools as well. In response to an appeal from the National Security League, the normal schools of 22 States have agreed to strengthen their courses in economics, social ethics, and other studies designed to train teachers for the work of civic education.

The renewed interest in civic education extends from the primary school to the university. "Civic instruction should begin in the first grade and continue throughout the school course," is the generally accepted opinion now. "Any instruction that makes the child conscious of his place in group life and develops in him a sense of responsibility for participating in the activities of his group may be called civic," says one; and instruction of this kind is finding a larger place in the elementary school. The extensive and fruitful activities of school children in war work gave emphasis to the im-

portance of children's participation in community enterprises to the extent of their ability, as a means of civic training. Civics becomes more clearly differentiated as a separate study in the grammar grades, where in a rapidly increasing number of cases it is of the vitalized "community civics" type.

In the high schools there is a pronounced tendency not only to enrich the opportunity for social studies of various kinds, but also to reorganize the treatment of these studies more definitely in relation to present-day problems and the immediate interests of the pupils. The trend in this direction was pointed out before the war by the committee on social studies of the National Education Association (see its report in Bulletin, 1916, No. 28, U. S. Bureau of Education). The influence of war conditions has been decidedly to accentuate the movement.

War issues and reconstruction problems have naturally stimulated interest in social studies in the colleges and universities. The fact that so many of the university specialists in the various social sciences were called upon by the Government for practical service has had its effect in bringing about this result. Moreover, the colleges and universities have been aroused to their responsibility for doing more than merely perpetuating the traditional body of knowledge incorporated in the several social sciences; of applying this body of knowledge to the training of an efficient citizenship. One institution at least (Boston University) has had a "chair of citizenship" endowed by a public-spirited citizen. The instruction in this department will draw upon the several social sciences for materials, but its distinctive feature is that it will take its point of departure in present-day problems, and will lay its primary emphasis upon *the making of citizens*, rather than upon the perpetuation of traditional bodies of knowledge.

So far as the writer knows, no other institution has taken just this step. But the social science courses of the universities and colleges are apparently undergoing a fairly general overhauling. Those institutions that conduct summer schools have this year made special effort to offer courses in the social sciences, and for the discussion of current issues, for the benefit of teachers. As an illustration of this, a bulletin of Teachers College, Columbia University, entitled "Courses in Education for Citizenship," announced 45 different courses under this general head for the benefit of summer students, largely teachers.

The interest in, and extension of, education for citizenship is by no means limited to the schools and colleges. A few illustrations of its wider extension may be given to show the tendency.

During the war it became an established policy of the Government not only to make soldiers of its citizens but also to make citizens of its soldiers. A remarkable educational system was established in the camps, both in this country and overseas. Wiping out illiteracy and imparting technical training were two chief points of emphasis, both indirectly of civic import. The overseas educational commission of the Y. M. C. A., acting in conjunction with the military authorities, developed a program of general education which emphasized courses with social and civic content. This work was finally taken over by the War Department. Similar work was done in the camps in this country. A most astonishing demand was shown among the men for the courses dealing with "war issues" and other social subjects.

The plans for the enlarged Regular Army of the future include provision for an educational system to be established in all camps with the explicit purpose of preparing the men while in service for the responsibilities of civilian life. The instruction will be both general and technical, and emphasis will be placed upon civic and social studies. A similar educational scheme is in contemplation for the Navy.

In view of this awakened interest in the problems of democracy, it will be a pity if the opportunity for its gratification by continued and organized study is limited to the small fraction of our disbanded Army which shall volunteer for continued service in the Regular Army or finds it possible to enter schools and colleges. It is estimated that two-fifths of the youth of the land between the ages of 15 and 17 are not in school; and if we add those from 18 to 20, we have a host of several million young citizens below voting age for whom no organized provision is made for preparation for the responsibilities of citizenship. A few are in public night schools, social settlements have classes for a small number, some are in Y. M. C. A. classes, the Y. W. C. A. has industrial clubs for girls, some business corporations have schools for their employees. But none of these existing agencies places much emphasis upon civic training, and all of them together reach but a small handful of the total number. Some interest has been awakened in regard to this matter, but little has been done.

In the city of New York there is an institution known as the City History Club, which last year comprised some 35 classes of young people pursuing civic and historical study under leadership. Heretofore these classes have been composed chiefly of children from the public schools. It is anticipated that this year there will be a hundred such classes, and their membership is to be extended to young people not in school. A plan has been proposed to introduce classes in the department stores and in social settlements. From now on

the chief emphasis is to be placed on civic training. It is said that the interest among the members is at present very great.

The universities are doing something through their extension classes. But there is nothing in this country to correspond to the Workers' Educational Association of England, which comprises 15,000 members who, organized in local classes, are pursuing courses of study under the tutelage of university men. It is said that the work done in these classes is of astonishingly high quality, in a large percentage of cases being equal to that done in the universities.

The organization of communities for war purposes bids fair to result in the continuance of similar organization in at least many localities both for public discussion and for public service. One of the problems of the continuance of this popular civic education relates to the supply of leadership and of materials for study and discussion. Money has not been wanting, during the war, to flood the country, both through governmental and private channels, with information and with speakers. Not to mention the educational campaigns of the Treasury Department, the Food and Fuel Administrations, the Department of Agriculture, the Committee on Public Information, the Council of National Defense, and other public agencies, there was the propaganda work of innumerable private agencies of which the National Security League may be taken as a single example. Among the many activities of this organization there may be mentioned merely by way of illustration its "Catechism of the Constitution," 100,000 copies of which were distributed, solely on request. "A large proportion of the letters were written by persons with foreign names, and it has been almost pathetic to read the expressions of gratitude with which the recipients of the catechism have acknowledged its helpfulness in acquainting them with the fundamental principles of our Government." Unfortunately, with the close of the war, there will doubtless be a falling off of financial support for such civic educational work.

One of the most significant movements for the extension of civic education is that which has accompanied the growth of woman suffrage. With the opening of the door to direct participation in government, the women have gone systematically about the business of educating themselves in civic and political matters. Moreover, they state as their purpose, "A country in which all voters speak English, read their own ballots, and honor the American flag." It may be said in passing that one of the most fruitful results of this movement among the women will be its effect upon the civic education of the men. A cartoon in a recent issue of "The Woman Citizen" shows a woman asking her husband, whose countenance betrays extreme bewilderment, the essential differences between Republican and Democratic principles.

The League of Women Voters is developing an elaborate organization, with national headquarters, State auxiliaries, and local branches, by means of which it proposes to instruct its members in their civic responsibilities and in political procedure. Is there here a suggestion of method for reaching the host of young citizens below voting age who are not in school? If so, the kind of instruction given in the latter case would doubtless differ to some extent in kind from that which the women seem to want. The women are faced suddenly with certain political responsibilities, and the questions they are asking relate chiefly to technique—as, for example, How shall we register? They are asking such particular questions as, For which candidate shall I vote? They are also much more eager than most men to know exactly the differences between the several party platforms.

The women are not only developing an effective organization by which to reach all women voters, but they are evolving civic primers, courses of civic study, and similar literature. This is done through national headquarters, State auxiliaries, and local branches. As an example, Massachusetts has developed a primer of which Part I deals with the following topics:

Who is a citizen?
How does one become a citizen?
What part does the citizen have in this Government?
Does he have the same part in all governments?
When does a citizen share in government?
What is an election?
When are elections held?
Are all officials elected at the same time?
Can any citizen vote because he is a citizen?
What must he do in Massachusetts to get the right to vote?
Who can register?
Where does one register?
When must one register?
Why are registration and voting important?
Should every citizen vote?
Where does he vote in Massachusetts?
What is the proceeding at the polling place?
What is our system of voting called?
Why should the ballot be secret?
Illustration of a ballot.
If the first ballot should be spoiled by wrong marking, what can the voter do?
What is a straight ticket?
How does one mark a ballot for a straight ticket?
Are there good reasons for not voting a straight ticket?
When your candidate is elected is that the end of your interest in him?
What will a good citizen do?

It is said that the women's clubs will discuss civic questions more than any other subject this year.

New Hampshire last summer held a "citizenship school" for women at the State College. More than 200 women of the State.

representing every walk of life, were in attendance for four days. "A big Boston daily sent one of its humorous-minded correspondents with a cartoonist to write a Sunday story. * * * The two men spent a morning at the school and at noon they telegraphed the city editor there would be no funny story; the quality of thought was something they could not joke about." Dartmouth College has invited this citizenship school to meet there next year and to accept its cooperation.

One of the leaders of the civic education movement among women, when asked about the newly "awakened interest" in the matter, recently remarked, "The 'awakening' so far has been chiefly an awakening of *enthusiasm*. So far as effective programs are concerned, we are still in the experimental stage." Though a promising beginning has been made, they are dissatisfied with the outlines and courses of study so far prepared. This statement regarding the present status of civic education for women characterizes equally well the movement with other groups, though it is not always so frankly acknowledged. It is true in the schools; it is true of the Americanization movement; it is true with regard to the community organization movement. There is real danger that the "enthusiasm" for civic education, so stimulated by the war situation, may swell, like a gas bag, to the point of bursting and vanishing unless at the same time a constructive and effective program is worked out. This does not imply that nothing has been done; but constructive work has only begun.

The need for a thoroughly trained citizenship to meet the problems of reconstruction will be many times greater in the years to come than it was during the war. Then there were certain pressing problems relating to the relatively small group of illiterates and non-English speaking people, and to the development of an adequate supply of trained industrial workers. But the challenge of an external foe was sufficient to bring forward competent and disinterested leadership and to rally the entire population, with few exceptions, to loyal support of this leadership in the great national enterprise. In the postwar period that is upon us we still have with us the problem of the illiterate and of a non-English speaking population, and also the problem of vocational training. But the threat of an external enemy has been removed, and with it its national solidifying influence. Group interests tend to take the place of a common national purpose; selfish motives tend to come again to the surface.

The solution of the vastly complex problems of reconstruction will be left much more largely to private initiative and enterprise and leadership than were the problems of war. It is the testimony of many who have talked intimately with returning soldiers that there

is among them a widespread repugnance to all suggestion of "public service," and a singleness of purpose to "get a job" and to "make money"—a perfectly natural state of mind in view of what they have passed through for their country's good. It is doubtless a temporary attitude of mind in the case of many; but it suggests a period of reaction against the intensified patriotism of war time, and this in the face of public dangers within the Nation that far surpass any real danger of conquest by a foreign foe. To permit the present enthusiasm for citizenship training to be dissipated for lack of either a constructive program or of financial support would be no less than a catastrophe.

It may be that, as a people, our interest in civic education, at least as it pertains to certain problems, is due to alarm rather than to constructive imagination. It is better, however, to be frightened into salvation than not to be saved at all. There is, for example, an almost feverish zeal for the "Americanization" of our foreign population. National, State, and local governments, school authorities, chambers of commerce, women's clubs, civic organizations of many kinds, have made it an issue. This work had its beginnings before the war, but it was not until the Nation was in the stress of war that it was stirred to its depths by a realization of the danger from a considerable fraction of the population that is not inspired by an intelligent comprehension of American ideals and institutions, and because of ignorance of a common language is not capable of effective teamwork for common ends.

There is no question of the widespread concern and seriousness of intent in regard to the Americanization problem. Neither is there any doubt of substantial progress already made in dealing with it. And yet, as in other fields of civic education, only a beginning has been made in developing an effective program. Much remains to be done even to *define* the term "Americanization" in the popular mind. The use of the common national language is indispensable for efficient citizenship, and the elimination of illiteracy and of inability to speak and understand English is one of the first imperative steps. That is not "Americanization"; it is only a step toward it.

It is necessary to teach the immigrant the use of the English language; but his education in American ideals and institutions may not safely be deferred until he has mastered it. It is not to be expected that he can learn much of these ideals and institutions through the process of learning primer English; but it *is* possible for him to learn much English as a by-product of instruction in American ideals and institutions. The problem, first, is how to reach him, for the work would have to be done largely in his own language; and, second, the preparation of subject matter really

adapted to his needs. The foreign-language press affords one channel of approach which is already used to some extent. The subject matter now available for use either by the foreign-language press or by teachers who can speak the foreign language, assuming that such teachers can be found, is entirely inadequate. There is need for constructive effort in this field.

One vital factor in the "Americanization" process is too little emphasized in existing programs, and this is the regular day public and parochial schools. While enthusiasm runs high for the Americanization of the foreigner, it has been difficult to elicit an equal enthusiasm for civic training in the schools. This is partly because the Americanization program has so far chiefly been one of organization and of teaching English, both of which appeal to the "business man" and to popular interest, while the problems of the school relate to subject matter and methods, the work of specialists. The public school has always been recognized as an Americanizing influence, but it has by no means reached the limit of its possibilities in this direction. One reason is the lack of popular demand and support.

The point now is that as a factor in the Americanization of our foreign population, even of the *adult* foreigner, *the public and parochial schools surpass in importance all other means.* Their influence may not be so direct, but it is vastly more far-reaching and fundamental. The schools extend the Americanizing process to the native born as well as to the foreign born, and without this the Americanization of the foreigner is hopeless. They build for the future with the younger generation of the foreign born. And, finally, it has been demonstrated that one of the most effective channels through which to reach the adult population is through the schools. This was accepted as a fact during the war when the schools were utilized constantly as a means of establishing a public morale and for the dissemination of war propaganda.

VII. EDUCATIONAL HYGIENE.

In no former year has so much, so varied, and so far-reaching work been done in the field of educational hygiene. In this report a few of the outstanding features are reviewed. No effort has been made to touch upon matters of research or investigation. Practical efforts only are recorded.

LEGAL ENACTMENTS.

During the year 1919, legislation relative to health work or physical education in the schools was enacted by 15 States. Of these, eight[1] deal specifically with health work or health super-

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sonable expense as may be necessary for the promotion of the physical welfare of children of preschool age in their respective districts, including the education of parents in matters pertaining to child welfare. The power herein granted to local boards of education shall only be exercised with the consent of the parents.

A committee, consisting of the State director of health education, the dean of the State school of education, the dean of the department of medicine of the University of Utah, the secretary of the State board of health, and the director of the department of home economics of the agricultural college, shall provide and recommend plans for carrying into effect the provisions of this section. Such plans shall be approved by the State board of education.

SEC. 4. This act shall take effect upon approval.

Approved March 12, 1919.

Upon passage of the act the State superintendent of public instruction, Dr. E. C. Gowans, resigned his office and was appointed to the new office of State director of health education in order to put into effect the plans he had formulated for the work during the preceding months.

In New York the physical-education law was so revised as to bring the administration of physical education fully under the State department of education. In the original law the State military training commission exercised a quasi-administrative function.

The effectiveness of the California law has been greatly augmented by an increase in the appropriation for the administration of the law from $12,000 to $40,000.

For the third time a physical education bill failed of passage in the Massachusetts Legislature.

OPPOSITION.

Neither enactment of legislation nor effective administration of laws proceeds without opposition. Not only the opposition of inertia but also the active opposition of conscientious objectors. Most of the laws recently enacted carry limiting provisions, exempting from physical or medical examination and medical treatment pupils whose parents or guardians object thereto. To a considerable extent this is due to the unfortunate confusion of physical examination with medical or pathological examination. A clear definition of physical examination as a positive index of physical capacity rather than a catalogue of defects is imperatively needed. Further, it should be made clear that variations from a theoretical normal are not necessarily defects any more than a deviation in arithmetical ability from the theoretical standard is a defect.

A radical expression of this opposition is found in a bill which passed the lower house of the Minnesota Legislature. The gist of the bill is in the following citation:

That medical examination and treatment, including dental and physical, of persons residing in this State who object thereto, and in case of minors whose

parents or guardians object thereto, be, and the same are, prohibited; provided this act shall not apply to the insane nor to examinations ordered by the court under existing laws or judicial procedure; and provided further, that where the regularly constituted health authorities have reasonable grounds to believe a person is afflicted with a contagious, infectious, or venereal disease, and such person, or those in control of him, is notified thereof, then nothing in the act contained shall exempt such person from quarantine regulations where the quarantine laws of the State are applicable, or from submission to examination by a regularly licensed physician or surgeon *selected by him or, in case of a minor, by his parents or guardian*, whereupon a certificate by such physician or surgeon showing the results of such examination shall be furnished to said health authorities.

In opposing this bill Miss Elizabeth Bray, of the Minnesota Public Health Association, pointed out that—

It is opposed to the whole movement for public health nurses and school nurses; but there is no need for such legislation against compulsory examination, for the examinations made by these nurses are now and always have been without compulsion, and purely optional on the part of those examined.

The bill goes on to do away with the universal police right of properly constituted health authorities to investigate cases of smallpox, scarlet fever, tuberculosis, diphtheria, etc. It compels the health officer to delay action until another physician is found who may then make the decision without being responsible to anyone.

This gives to any sort or kind of man who can get an M. D. attached to his name the power to decide on serious emergency questions relating to the health of the whole community, while the constituted authorities of the people, responsible to the people, must stand aside and take his word, although the M. D. making the decision has no responsibility in the matter at all.

In the Pacific Coast States opposition to school health work has crystallized in the Public School Protective League with the object "to protect the public school from medical and ecclesiastical exploitation." Among their principles enunciated by the Yakima County (Wash.) Public School Protective League, of which the county superintendent of schools is the president, are the following:

We believe that the right of parents and children to choose their own methods of treatment in case of illness is as sacred as their right of religious choice.

That questions of food, nursing, and doctoring belong to the home and not to the school.

That paternalism in the public schools is opposed to the public good and tends to deprive individuals and families of their sacred rights and duties under the Constitution of the United States.

That the use of public school funds to pay for medical services or advice is as gross a misappropriation of such funds as would be the employment of religious advisers.

We therefore purpose to take such educational, legislative, legal and judicial steps as may be requisite or necessary in the judgment of its members or trustees to protect the public schools of Yakima County and the State of Washington from exploitations on behalf of any medical, political, religious, or other sect or cult, and to prevent, by such means as may be in its power, the exploitation of the schools and the pupils thereof, and the educational means,

funds, and machinery of the public schools for the purpose of furthering the special privileges, aims, and aspirations of any such sect or cult as opposed to the general welfare.

SCHOOL CLOSURE AGAIN.

Experience with the influenza epidemic confirms the judgment already generally accepted that school closure is an extremely clumsy, unscientific, extravagant, and generally unsatisfactory means of controlling epidemics, and that "the modern method, consisting of careful daily inspection of infected schools, isolation of sick children, and quarantine of contacts is both more effective and more economical."[1]

As yet the enormous volume of evidence upon this matter incident to the influenza scourge has not been sifted, but enough has been done to demonstrate that cities that kept the schools open fared no worse than the cities that closed the schools; and partial sifting of the evidence indicates that where schools were kept open and close supervision was exercised the incidence was less than the expectation. The testimony of New York, Chicago, and Pittsburgh seems conclusive upon this point.

ORAL HYGIENE.

Increasing appreciation is shown of the importance of mouth hygiene. During the year two States—Iowa and North Carolina—have made statutory provision for dental clinics for school children. Many cities have given increased attention to this "gateway" of hygiene improvement. The dental hygienist, always a woman, whose functions are to do prophylactic work and to teach mouth hygiene, has passed the experimental stage and may be regarded as a fixed institution. The Rochester Dental Dispensary has established a one-year training course for dental hygienists.

In a report of Five Years of Mouth Hygiene in the Public Schools of Bridgeport, Conn., Dr. Alfred C. Fones, the director of the work, presents some unusually interesting material.[2] The force consists now of 2 supervisors, 3 women dentists for emergency repair work, and 26 dental hygienists. Care is extended to the 20,000 children in the first five grades, including the parochial schools.

One result of the five years' work is an average reduction of 33.9 per cent in the number of cavities in the permanent teeth of the fifth-grade children. The figures were obtained by comparing this year the average number of cavities per child in a given school with the average found in the same grade of the same school before mouth

[1] See Bureau of Education Bulletin, 1919, No. 48.

[2] An outline of the organization of this work may be found in the Report of the Commissioner of Education for 1918 (Bulletin, 1918, No. 48).

hygiene work was inaugurated. It is to be remembered that no repair work had been provided for these children; the work consisted of prophylactic treatments, toothbrush drills, and instruction in mouth hygiene.

Another interesting feature of the report is the record of decrease in retardation. Age-grade surveys made by the superintendent of schools in September, 1912, and in November, 1918, show a decrease in average retardation from 40 per cent to 20.1 per cent.

Dr. Fones shows that changes in the three major factors of school organization contributing to retardation can not account fully for this 50 per cent reduction. The average number of pupils per teacher had increased from 38 to 40; the balance, therefore, is on the wrong side of the ledger. A very effective reorganization of the courses of study no doubt had had the effect of increasing the pupils' interest in their work. Likewise some salary and classification modification had "probably resulted in a more wide-awake teaching body." Dr. Fones justly concludes that these causes, unaided by the improved health of the children resulting directly or indirectly from the mouth hygiene work, are insufficient to account for the remarkable reduction of retardation.

It is interesting to note further that the health department of Bridgeport plans to convert its school medical-inspection service into a child hygiene service, whose purpose it shall be to provide medical advice and supervision to every child from before birth until it leaves school. In order to do this it is expected to establish health centers, supervise the midwives, provide prenatal and postnatal care, and carry health education about children into every home in Bridgeport.[1]

NUTRITION CLASSES.

The "nutrition class" was first mentioned in the Report of the Commissioner of Education for 1918, in which the results of the experimental class in Public School No. 64, New York City, were summarized. The idea has made rapid progress during the past year. It has been consistently forwarded by the special health education work of the Bureau of Education and the Child Health Organization. A number of cities have incorporated the idea in their school health programs. The Minnesota Public Health Association includes *nutrition clinics* in its State-wide program of children's clinics for each county.

[1] *A Rural Program.*—In the summer of 1918 the North Carolina State Board of Health set going a county-by-county traveling dental repair service for rural schools. By September three counties had been covered. The teeth of 3,763 children had been treated in 146 open-aid dispensaries. Of all the children examined, over 7 years of age, 75 per cent had decayed permanent teeth.

Nutrition clinics will be conducted in Minnesota by the Minnesota Public Health Association and the Northwestern Pediatric Society. They will aim to do two things: First, eradicate, in so far as possible, the great amount of malnutrition found among school children, and, second, answer the need for complete medical examinations of school children.

The nutrition clinics will be separate from the children's clinics held by the Northwestern Pediatric Society and the Minnesota Public Health Association, but they could be arranged with economy to take place on consecutive days.

A national organization bearing the name "Nutrition Clinics for Delicate Children" has been formed and incorporated with headquarters at 44 Dwight Street, Boston. The president is Dr. W. R. P. Emerson.

The leading objects of this organization are:

To establish nutrition clinics for the diagnosis of malnutrition, and nutrition classes for care and treatment; to bring about the periodical weighing and measuring of all children in order to identify those who are 7 per cent or more underweight for their height; to provide standardized basic physical examinations, that defects interfering with growth may be corrected and the children thus be made free to gain; to arrange for the care of these children in open-air or at least in open-window classes with a reduction of school pressure during the period of treatment; to secure the presence of parents at the physical examinations and at the nutrition classes so that there may be effective cooperation in getting the children well in their own homes.

BARBER CLINIC.

Kenosha, Wis., makes a unique addition to the list of school clinics. A barber clinic, for the effective care of neglected children, has been installed. The main item of equipment, three especially designed chairs, were made in the manual training shop. There is a resulting self-respect on the part of the children, as well as a reduction in pediculosis. The need for such reduction is indicated by the fact "no other one cause of exclusion was so great." One child had lost 60 days of schooling in one year from this cause.

PHYSICAL CORRECTION PROCEDURE.

In the spring of 1918, Dr. H. F. True, director of the school health department of the public schools of Los Angeles, wrote to the Council of National Defense calling attention to "prevalence of correctable defects among high-school boys." Analysis of the examination records of 6,000 high-school boys showed 140 boys with 42 different disabilities sufficiently grave to prevent their taking part in the regular physical-training exercises. In addition, there were 308 with spinal curvature sufficiently marked to limit in some degree their participation in the regular physical exercises, and 400 with "moderate flat foot."

This partial grouping gave 848, about 14 per cent, who would fall below military requirements. Several types of defect—visual, audi-

tory, dental, and other—were excluded from the enumeration because the object was to show the large numbers of defects that "our physical trainers could do away with." Dr. True's letter was referred to the Bureau of Education, and suggestion was made to him by the bureau that he classify all boys on the basis of the fourfold physical classification adopted by the Army; that, in addition to this examination for defects, positive physical efficiency tests be adopted; and that definite method be set up for "making actually fit those who are potentially fit for military service."

The board of education added to their physical-education staff two physicians and one teacher to handle the correction cases. Tests were adopted tentatively for strength, endurance, and control. The aid of the psychologist was sought in cases where muscular control was very defective. This was in preparation for the following school year.

Dr. True's report for the year 1918–19 shows, in spite of the influenza epidemic which seriously interfered with his plans, the following results:

As an additional work of much more pleasant character, the members of the staff entered upon a course of study in corrective physical procedures. In this work they were joined by practically all of the physical-training teachers of the school system. These two groups of school people, united in a work of great interest to both, met evenings, and there, under the guidance of Dr. Sven R. Lokrantz, formerly of Boston and Stockholm, studied methods for the improvement of such children as were laboring under developmental handicaps that could be corrected by the means which the school has at its command.

The workers now trained in corrective physical procedures will be able to engage in that work and will be able to handle those children who have habitually been excused from physical training, and a line of work will be laid out for them by experts, so that we may say that the child physically below par will be receiving his share of physical education, and of such a character as will particularly fit his needs. In other words, the physically talented will be further developed by the more highly specialized athletic work, into which he will naturally fall; the average individual will get the fine average physical training given by the schools, and the physically less-fortunate individuals will be assisted by these special means.

It shall be the object of the workers along all lines of physical upbuilding to stimulate in the child's mind the thought of perfect health and physical perfection, never calling attention to the fact that he is below what he should be, and should he know this, never emphasizing it to him, but always holding before the normal or the subnormal child the fact that by conscientious work he will become stronger and healthier, and more able to test up in actual measurements to a higher level than he has reached before. As with the adult, so with the child, the attainment of tangible and demonstrable success gives him great satisfaction and happiness.

SEX EDUCATION.

High schools.—The division of school hygiene of the Bureau of Education and the division of venereal diseases of the Public Health

Service have worked together during the past year in an effort to contribute toward the solution of this difficult and important problem. The endeavor has been to work out the principles and methods whereby sex may be taught in its normal relations. Three (3) guiding principles have been observed:

1. The object of sex instruction is development of positive ideals of physical strength and vigor and social uprightness.

2. Instruction in sex must be in its normal setting as a part of subjects already in the curriculum. Isolation and special treatment must be avoided as placing false emphasis, and therefore taking the matter out of its normal setting.

3. A concrete program must be based largely upon successful experiences by individual teachers, which should be collected, digested, and organized.

The work has been organized along three (3) lines:

1. *Conferences.*—Conferences for the purpose of exchanging views, turning up successful experiences, arousing intelligent interest, and acquainting teachers with methods of sex instruction in connection with courses in biology, physical education, civics, domestic science, and English literature. A series of 12 conferences was held in 11 Eastern States. Each conference was of two days' duration. The average attendance, 206, consisted of teachers intelligently interested in the problem. The program in each case was worked out after conference with leading educators and health authorities in the several districts. As a result, there has been brought to light a great deal of intelligent sex-education work in connection with biology, home economics, physical education, civics, and literature, as well as a general acceptance of the principles of sex education specified above.

2. *Monographs.*—In an effort to reach all interested educators in the country, a series of four monographs has been prepared, and letters offering them sent to over 25,000 teachers. Replies requesting them have received from 5,275 educators.

3. *Exhibit.*—In addition to the work with educators, a "Keeping Fit" exhibit for boys, in which the facts of sex are subordinated to a general health program, was prepared primarily for boys in high schools, and a campaign launched in May through the State boards of health and the Y. M. C. A. in which this exhibit was shown to boys in high school and industry. Reports received show that over 250,000 boys saw the exhibit prior to the end of the year.

Interdepartmental Social Hygiene Board.—This board, created by act of Congress in 1918, the membership of which includes the Secretaries of the Navy, War, and the Treasury, and the Surgeons General of the Navy, the Army, and the Public Health Service, is charged, among other duties, with the disbursing of $300,000 a year for the years 1919 and 1920. The money "shall be paid to such uni-

versities, colleges, or other suitable institutions or organizations as, in the judgment of the Interdepartmental Social Hygiene Board, are qualified for scientific research for the purpose of discovering and developing more effective educational measures in the prevention of venereal diseases and for the purpose of sociological and psychological research relative thereto."

The board has taken the position that it would be unwise to support measures or demonstrations involving the presentation of the venereal diseases as a separate and distinct subject in the school program; but that, on the contrary, consideration of venereal diseases should be woven into the general subject matter of hygiene so that the causes, the carriers, the injuries, and the prevention of these diseases should be considered in their important relationship with the causes, carriers, injuries, and prevention of other diseases.

In pursuance of this policy, allotments already have been made to 30 colleges, universities, and normal schools to assist them in developing departments of hygiene. It is stipulated that the curriculums of such departments "shall include courses and conferences in informational hygiene and courses and conferences in the training of the application of hygiene, emphasizing with appropriate and due proportion and with proper tact and persistency the serious importance of venereal diseases, their causes, carriers, and prevention, and emphasize at the same time the other important facts and applications of general hygiene, individual hygiene, group hygiene, and intergroup hygiene."

The board has further proposed to the chief educational officer of each State to assist in the establishment within the State department of education a division of educational hygiene and courses in the principles and practices of hygiene in all the educational institutions of his State, public, institutional, and private; elementary, secondary, normal, college, university, and professional.

This division of educational hygiene should influence selected schools to train teachers of hygiene in all the subdivisions of that subject; and should influence elementary and secondary schools to organize and carry on courses for all children whereby they may be safely, wisely, and properly instructed in the principles and practices of hygiene that are fitting and appropriate to the age period and the maturity and the development of the child concerned.

CHILDREN'S BUREAU CONFERENCES ON STANDARDS OF CHILD WELFARE.

A fitting conclusion of the children's year program of the Children's Bureau and the woman's committee of the Council of National Defense was the conference on standards of child welfare. The

specific object of this conference, which included representatives of many of the allied nations, was to crystallize the results of the children's year campaign into a program which, as suggested by President Wilson, shall "set up certain irreducible minimum standards for the health, education, and work of the American child." Five committees were appointed to formulate minimum standards, respectively, for: Children entering employment; protection of mothers; protection of infancy and the preschool child; the school child and the adolescent child; and protection of children in need of special care.

The committee on the school child and the adolescent child submitted the following report:

SCHOOL CHILDREN.

1. Proper location, construction, hygiene, and sanitation of schoolhouse; adequate room space—no overcrowding.

2. Adequate playground and recreational facilities, physical training, and supervised recreation.

3. Open-air classes and rest periods for pretubercular and certain tuberculous children and children with grave malnutrition. Special classes for children needing some form of special instruction due to physical or mental defect.

4. Full-time school nurse for not more than 1,000 children to give instruction in personal hygiene and diet, to make home visits to advise and instruct mothers in principles of hygiene, nutrition, and selection of family diet, and to take children to clinics with permission of parents.

5. Adequate space and equipment for school medical work and available laboratory service.

6. Part-time physician with one full-time nurse for not more than 2,000 children, or full-time physician with two full-time nurses for 4,000 children for—

(*a*) Complete standardized basic physical examinations once a year, with determination of weight and height at beginning and end of each school year; monthly weighing wherever possible.

(*b*) Continuous health record for each child to be kept on file with other records of the pupil. This should be a continuation of the preschool health record which should accompany the child to school.

(*c*) Special examinations to be made of children referred by teacher or nurse.

(*d*) Supervision to control communicable disease.

(e) Recommendation of treatment for all remediable defects, diseases, deformities, and cases of malnutrition.

(*f*) Follow-up work by nurse to see that physician's recommendations are carried out.

7. Available clinics for dentistry, nose, throat, eye, ear, skin, and orthopedic work, and for free vaccination for smallpox and typhoid.

8. Nutrition classes for physically subnormal children, and the maintenance of mid-morning lunch or hot noonday meal when necessary.

9. Examination by psychiatrist of all atypical or retarded children.

10. Education of school child in health essentials.

11. General educational work in health and hygiene, including education of parent and teacher, to secure full cooperation in health program.

ADOLESCENT CHILDREN.

1. Complete standardized basic physical examinations by physician, including weight and height, at least once a year, and recommendation for necessary treatment to be given at children's health center or school.
2. Clinics for treatment of defect and disease.
3. Supervision and instruction to insure—
(*a*) Ample diet, with special attention to growth-producing foods.
(*b*) Sufficient sleep and rest and fresh air.
(*c*) Adequate and suitable clothing.
(*d*) Proper exercise for physical development.
(*e*) Knowledge of sex hygiene and reproduction.
4. Full-time education compulsory to at least 16 years of age, adapted to meet the needs and interest of the adolescent mind, with vocational guidance and training.
5. Clean, ample recreational opportunities to meet social needs.
6. Legal protection from exploitation, vice, drug habits, etc.

It is somewhat mystifying to find that the membership of this committee included no educator. The inference would seem to be that education and educators are not concerned with child welfare. Is the reproach partly justified by the inveterate emphasis of "education" upon teaching subjects rather than upon educating children? The difference is aptly stated by Dr. Macfie Campbell in his paper before the conference on the Place of Mental Hygiene in the Child Welfare Movement:

Then we must know for what the child is constitutionally equipped; we must not assume that all can be prepared for the same later activities. We shall give children the opportunity of developing each one his own talents. We shall lay less stress upon the amount of information acquired; that is not what determines adult health, efficiency, and happiness; the latter depend upon the harmonious adjustment of the conflicting demands of human nature; they depend upon being able to adapt one's self happily and productively to the mutual restrictions of community life, upon the ability to grasp situations objectively and not through the distorting influence of passion and prejudice; they depend upon pertinacity of purpose, adequate output of energy, responsiveness to the deeper issues of life.

If such be the goal of education, the teacher will need to be as sensitive to moody periods on the child's part as to bad spelling; will pay attention to day-dreaming as well as to faulty declensions; will take truancy not as a statutory crime, but as a personal problem, the roots of which have to be traced; will regard pilfering and lying as problems of equal interest; will note any sexual aberrations not as awkward incidents disturbing one's own prudish repressions, but as indications that one of the most important biological forces is causing difficulty, and that help may be needed.

The teacher imbued with these principles and taking seriously the task of training the child will seek to make the atmosphere of the school tonic, character-building, as well as instructive; and will be forced to recognize that the school and the home can not be treated independently, that there should be a continuity of influence over the child, that home training and school training should be guided by the same principles.

VOLUNTARY ORGANIZATIONS.

The year has been conspicuous for the volume, variety, and effectiveness of work done by nongovernmental agencies—national, State, and local—in the interest of physical education. The scope and variety of these activities is illustrated by the following summaries of the work of some of the national organizations:

Child health organization of America.—Beginning June 1, 1918, with a budget of $15,000, the organization realized that only by working through existing agencies and groups could it hope to wage a nation-wide campaign for child health. Cooperating with the division of school hygiene of the Bureau of Education, the director of field work served on a dollar-a-year basis initiating this work of stimulating interest in child health through the schools of the country. Attractive readable literature prepared by the Child Health Organization has been printed on the Government presses, and sent out upon request, free of charge to the teachers of the country. As a result of this Government work alone it is estimated that over 10,000,000 children in 30 States have kept monthly weight records and are being taught health habits.

Because of this advocacy of monthly weighing of school children, three of the largest cities in the country have already put scales in every school. Hundreds of others are following their lead.

In addition to Government cooperation, more than 800 public health, social, and educational groups are now pushing in their own communities our program for child health.

Over 29 normal schools have requested and received help in training their students in the methods of teaching health habits.

Committee on Health Problems in Education.—The chairman, Dr. T. D. Wood, in his report for 1919, states that the committee literature now includes three pamphlet reports as follows: "Minimum Health Requirements for Rural Schools," of which 800,000 copies have been printed; "Health Essentials for Rural School Children," 50,000; "Health Chart Pamphlet," 10,000 copies; and "Set of 58 Health Charts," of which 600 sets have been printed. A gratifying demand continues for all these publications.

A fourth pamphlet of 75 pages, entitled "Health Improvement in Rural Schools," has been completed and sent to the printer. "It contains actual statistics and descriptions by health workers of significant and successful experiments and demonstrations of health work conducted in and through rural schools in different parts of the country."

"The next undertaking of the committee will be a study and report of standardization of health norms and health defects of school children."

National Child Welfare Association.—This organization devotes itself largely to the production of exhibit material. The following material on hygiene was issued during the past year:

The A 1 American Girl, 10 panels; Hygiene for School Children, 12 panels; The American Citizen, 25 panels; Modern Health Crusaders, 5 panels. In addition, the following panels were made for special hygienic work by other organizations: 3 panels for the New York Milk Committee; 5 for the National Committee on Mental Hygiene; 10 for the American Social Hygiene Association; and 6 on housing, for the Army Educational Commission of the Y. M. C. A.

National Physical Education Service.—In December, 1918, the National Physical Education Service was established by the Playground and Recreation Association of America, at the request of the National Committee on Physical Education, to organize and direct the movement for State and Federal legislation for physical education. An initial appropriation of $10,000 was made.

Thus far, the efforts for legislation of this service have been confined to the promotion of State legislation. Seven special representatives having organization experience were sent into 17 States where legislatures were meeting in 1919. They gave valuable assistance to the local forces working for physical education legislation. In six States such legislation was enacted and in several other States foundations were laid for future action. One outstanding result of this experience with the States is a strengthened conviction that Federal legislation is necessary both to stimulate and to supplement State legislation.

Special articles have appeared in or are in preparation for 33 magazines. Two pamphlets entitled "Physical Fitness—A National Necessity," and "The Need for Universal Physical Education—A Growing National Conviction" have been printed and have had wide distribution.

The subject of physical education, in the near future, will be presented by speakers at a total of more than 40 conventions and conferences.

Plans for the immediate future involve the organization of effective State committees and the preparation of campaigns for physical education legislation beginning with the States affording the most promising outlook; a great increase in the volume of publicity; assistance to various organizations in planning to carry particular responsibilities in the general campaign; and continuous conference with leaders in the various interested organizations regarding plans and policies. It is the definite policy of this service not to magnify its own importance, but rather to organize for effective and unified cooperation all agencies aiming toward the common goal.

Junior Red Cross.—The Junior Red Cross makes Red Cross service applicable to the health and social needs of schools and school children; it plans, through the School Auxiliary, to help in the de-

velopment and utilization of the resources of the schools toward the solution of some of the health and social problems of the schools and communities; and it expects to provide, through appropriate Red Cross Chapter channels, assistance to children who are handicapped physically or economically. It hopes, furthermore, to accomplish its program, as far as possible, through the active participation and interest of the children in themselves.

Modern Health Crusaders.—This movement for direct teaching of health habits, sponsored by the National Tuberculosis Association and its affiliated State organizations, during the past year reached every section of the country and every type of school from the largest city institution to the one-room rural school.

More than 3,000,000 American school children in 1918–19 qualified as Modern Health Crusaders. Stimulus was provided in large measure by a national tournament in health knighthood; 111 classes and ungraded schools which mustered 100 per cent of their pupils as Modern Health Crusade Knights Banneret between February 9 and May 24 received trophies in the form of banners suitably inscribed.

ROTARIANS.

The International Association of Rotary Clubs at its annual convention indorsed the program of its committee on work among boys. This program calls for increased emphasis upon the solution of the vocational, physical, and social problems of boyhood:

> The time is near when each nation must more fully recognize the importance to its own future welfare of the proper training and development of its boys, more particularly because modern city life has in a greater or less degree diverted the responsibility for the development of those human qualities which make for character and success, and sooner or later each State will see the necessity of taking upon itself the coordination of all child-helping welfare agencies and organizations, including the public and private schools, not only to the end that the vocational aptitudes of the boys may be studied and determined scientifically, but also in order that the mental, moral, and physical development of every child may be nationally directed and supervised.

Specifically, it requires that each local club carry eight committees relative to work among boys: (1) Survey of boy life, (2) physical development, (3) public health, (4) vocational education, (5) juvenile delinquency, (6) nationalization and spare-time education, (7) legislation, (8) publicity. The functions of the physical development committee are defined as follows:

> This committee would cooperate with the public schools, playgrounds, and other recreation centers, including organizations working for boys, and should give particular attention to physical culture and education. If not legally established the committee should strive to make physical education in the public schools not only practical but compulsory.

VIII. COMMERCIAL EDUCATION.

THE REPORT OF THE N. E. A. COMMISSION.

An important contribution in the past year to the subject of commercial education is the report on business education in secondary schools, submitted as a report of the Commission of the National Education Association on the Reorganization of Secondary Schools and published as Bulletin 1919, No. 55, of the United States Bureau of Education. The importance of this report is due in part to the fact that it represents the first serious consideration of this subject by that association since 1903, and in part to the marked necessity that has arisen since that year for some modification and extension in commercial education to meet the rapidly developing demands of business for better clerical service and for management positions in diversified production and distribution, in the financial world, etc. The committee in preparation of this report endeavored to synthesize the dual phase of business training and commercial education. While recognizing the need of definite training for specific jobs in the eighth, ninth, and tenth grades, it urges due preparation in the fundamentals before beginning special commercial training. In a word, it would seem to urge as a definite policy the liberalizing of secondary commercial education.

It remains for the future to reveal how far the committee's interpretation and advice in respect to the purpose and function of commercial education may favorably react upon the progressive organization and administration of this type of educational training. While the program and function of the junior and senior high schools and junior colleges and evening classes for employed persons have passed the stage of experimentation and must soberly be articulated with the national school life, it is in these recently established and novel schools that effort to carry out the committee's explicit instructions in respect to business training will have the largest measure of sympathy. In them the committee's implied purpose of commercial education will be consummated if due safeguards are placed against the menace of overrefinement of technique as an end in itself, which may naturally ensue through overzeal on the part of school management and undue pressure from the outside business world. Recent reports from junior high schools in particular would seem to indicate that this danger is being soberly considered. The persistence of modern language and social science requirement in the earlier years may be taken as evidence.

On the other hand, public commercial educational conferences of the past year, notably the Twelfth Annual Convention of the National Society for Vocational Education, St. Louis, February 20

to 22, and the Department of Business Education of the National Education Association, Milwaukee, June 28 to July 5, plainly indicate a program for the organization and development of secondary commercial education in the narrower sense.

ASSOCIATIONS OF HIGH-SCHOOL TEACHERS OF COMMERCE.

Prominent among recent movements of teachers of business and commerce subjects to organize for the purpose of discussing special problems of the high school of commerce may be mentioned that of a group of principals of high schools of commerce and supervisory officials in commercial education of the eastern section of the United States, meeting in Brooklyn, April 15 and 16. Principal J. E. Downey, of the High School of Commerce, Boston, and W. E. Bartholomew, State Education Department, Albany, N. Y., acted as chairman and secretary, respectively. It is greatly to be desired that a larger number of these regional groups of commercial educators be formed.

EVENING CLASSES.

The outstanding feature in the development of commerce subjects in higher institutions in the past year is the extension of downtown evening classes in business and commerce. Under the guidance of able directors, schools of this type have been quick to anticipate and to respond to potential and present needs of business. The latest announcements show amplified courses in accountancy, banking, marketing, foreign trade, etc. The increase in the study of modern languages, noticeably Spanish, has been marked. The study of additional languages, particularly Russian, Portugese, Japanese, etc., is being introduced in the larger universities situated in and adjacent to the large commercial centers.

EDUCATION FOR FOREIGN TRADE AND COMMERCIAL ENGINEERING.

Two subjects deserving special mention in the field of higher commercial education are foreign trade and commercial engineering. Two successful national conferences, the first of each in the United States for the consideration of these subjects, were held in Washington. The proceedings of these two conferences were published as bulletins of the Bureau of Education, namely, Bulletin, 1917, No. 37, The Conference on Training for Foreign Service, and Bulletin, 1919, No. 58, Commercial Engineering. Increasing attention is given to the subject of educational preparation for foreign service by the larger national associations of commercial organizations, manufacturers, bankers, merchants, etc. The subject has received

special attention for several years in the annual programs of the National Foreign Trade Council, National Association of Manufacturers, and the American Manufacturers' Export Association. The United States Chamber of Commerce at its seventh annual meeting in St. Louis, April 29 to May 1, 1919, devoted for the first time a special session to the topic of foreign trade. It is therefore reasonable to assume that the interest of the national chamber may be reflected for good in the member chambers of this organization leading to increased opportunities for the study of foreign trade in local schools and colleges.

BUSINESS TRAINING FOR ENGINEERS.

This report would call special attention to the program of better business training for engineers which has developed during the past year. This program began with a conference in St. Louis last February and culminated in a national conference in Washington, June 23 and 24, attended by about 200 representatives of educational institutions, of Government and business, and of the leading engineering societies. A committee on this subject, appointed by the Commissioner of Education, carefully considered the increasing need of American business for men trained in engineering and business, made careful analysis of the work to be performed, and recommended subjects of study for use in higher institutions in consummation of the committee's object.

The University of Cincinnati has inaugurated a five-year cooperative course in commerce and administration, beginning September 22, 1919. That institution is one of the first of the larger institutions to carry out some of the committee's suggestions. The course is planned to meet the demand for men trained in production as well as in the commercial side of business enterprises. The very small group of higher technical schools that have been pioneers in this special type of training will be greatly encouraged by the gratifying reception of the committee's efforts. Pennsylvania State College offered in its summer session of this year a special course in factory organization, cost accounting, employment, and scientific management.

INCREASED INTEREST IN BUSINESS SUBJECTS.

Very encouraging reports have been received at the Bureau of Education the past year in respect to increased interest and enrollment in business subjects in private business schools, Y. M. C. A. schools, and corporation schools. Schools of this character naturally are more sensitive and more quick to respond to public demand for vocational training, and frequently afford an index to public interest. For example, the private business schools continue to reflect the

growing interest of women for office positions in clerical and secretarial practice. Y. M. C. A. schools, in common with the extension classes of urban higher institutions, show a general development in accountancy, organization, salesmanship, banking, transportation, and foreign trade. It is gratifying to note the increased attention given to the commercial aspects of production in the larger corporation schools and the growing tendency to appoint competent educational directors in charge of personnel training. Intrabusiness schools of this type are being rapidly extended to include retail merchant establishments, banking houses, commission merchants, and manufacturers.

IX. CITY SCHOOLS.

During the war every phase of educational activity was scrutinized as to its potential contribution for service to the country. The slogan for the schools was "Win the war," and the solution of all problems was approached from that standpoint, for it was soon realized that the schools were an essential part of the very machinery of modern war. Now that the war is over, the schools are beginning to turn their attention to their development for a permanent era of peace. Only one year has elapsed since the cessation of hostilities, and it is difficult to detect any decided changes. The attention of school boards during this period has been taken up largely with two important problems—the increase of teachers' salaries, so that the schools may not break down from a lack of qualified instructors, and the building question. Teachers are demanding more recognition; the course of study is being gradually modified; and school systems generally are being subjected to careful scrutiny to find evidences of weakness developed by the period of stress.

AN ADMINISTRATIVE PROBLEM.

No marked changes have been made in the method of electing school-board members, in the size of boards, or in the relation of city and school officials. The procedure of school boards has been in general the same. In some cities they refuse to grant the superintendent the power that is due him, and autocratic acts on the part of boards are reported. The interference of city officials — mayors, councilmen, aldermen, and commissioners—in the management of the schools still occurs. In these respects the situation has been practically the same as in other years.

One of the outstanding facts regarding administrative affairs is that in some of the larger cities there has been a lack of friendly cooperative relation between school boards and teachers. No doubt some boards of education have considered teachers as mere cogs in a

great machine. This is especially true in the great cities where school machinery is complicated and where there is no contact between the teaching staff and administrative authorities. In the nature of things only a few teachers can be acquainted with the members of the school board and with the superintendent, and these are not always representative of the teaching body. Certainly they are not so considered by the teachers unless they were chosen by the teachers to represent them. If a superintendent or a school board consult a few teachers selected at random, difficulties are apt to arise, and the whole administrative machinery may get out of gear. It is difficult for the school board to know what teachers to consult. The only democratic way is to consult them all. Some superintendents and school boards have realized that the intelligence of the whole teaching body should be capitalized and that it is unwise to consult only a few teachers. They have, therefore, encouraged the organization of teachers' councils. In some instances such councils have been organized only after considerable parleying with school officials. Much better results could be expected if the teachers were invited to offer their opinions upon matters that vitally concern the schools.

To autocratic boards and superintendents the claim of teachers to be heard in board meetings seems radical. What right, it is asked, have teachers to ask to be consulted? The school board is responsible to the people, not to the teachers, and therefore must formulate all policies. It is replied that no right is taken away from the board, for its province is to legislate, and it should do so with all the light available. No right of the superintendent is abrogated, for he, too, should make his recommendations only upon the fullest information possible.

If a teachers' council attempts to usurp the prerogatives of a board or of a superintendent, it has no excuse for existing. It is generally recognized that the function of a council should be: To secure active and effective direction of the schools by affording the largest opportunities for initiative on the part of teachers in the formulation of courses of study and in the selection of textbooks; to encourage professional interests and to furnish a ready and effective means for the expression of sentiments and opinions with reference to questions of school policy.

Superintendents and boards that have recognized teachers' councils report generally that the conferences of the members of the council and administrative officials bring great help to the latter. One superintendent says that the educational council has been of more help to him than to the teachers, that it keeps him in touch with them, and that he is thus able to know their opinions upon various matters. In other words, this superintendent is given a broader view of school affairs by those who are closest to the children. A teacher of children

knows the weak points of the course of study; she knows whether the textbooks in use are well adapted to the children in her grade. Granting that the opinion of a single teacher might not be worth much, the combined opinions of the entire teaching corps are certainly worthy of consideration.

Whatever course teachers' councils may take, it should be remembered that the school board and the superintendent are the final authorities representing the public and that teachers legally have no legislative functions. Wise school boards and superintendents should, however, utilize the first-hand knowledge that teachers have of school conditions.

SALARIES.

Before the war, educational and professional standards for teaching positions in the elementary schools had been raised slowly until most of the smaller and practically all the larger cities required new teachers to be high-school graduates, with a year or two of professional training, or in lieu of such training a few years of successful experience. After our entrance into the World War many city schools were compelled to lower these standards, because many teachers left the profession to accept more lucrative positions. Their places could not be filled with teachers of equal qualifications. The larger cities drew on smaller cities where salaries and standards were not quite so high, and the smaller in turn drew on the villages and rural schools.

The lowering of standards came about so quickly that the public was scarcely aware of the fact that the schools were depreciating. When it was discovered that there was likely to be a complete breakdown of the public-school system because of a lack of well-prepared teachers, campaigns were launched in every section of the country for better salaries. But salary increases came slowly. A few school boards gave teachers bonuses of from $50 to $100. Others granted small increases, usually about 10 per cent. Some effect was noted, but the bonuses and increases in salaries were so small in comparison to increases granted in other occupations and professions that teachers continued to resign. Even before the war, teachers were much underpaid as compared with stenographers and others in clerical positions. At the beginning of the war salaries of the latter class were largely increased, and their advantage over the teachers was strongly marked.

An increase of 10 per cent did not, of course, meet the increased cost of living. A teacher who had her salary increased from $700 to $770 had to lower her standard of living. If salaries had been increased 50 per cent, a teacher receiving $700 a year, as thousands were, would receive only $1,050, or about $350 less than the amount

necessary for her to continue the same standard of living as she had on her salary of $700 before the cost of living doubled.

The serious situation was not realized at first because the Nation was actively engaged in doing the work of the moment—winning the war; but at the close of the school year of 1918–19 many city school boards, usually backed by public sentiment, but sometimes not, granted increases for the year 1919–20. The increases, often about 25 per cent, were not as much as they should have been, but a promising though tardy beginning was made.

When conditions were realized and the public was willing that salaries be increased, school boards in many instances were helpless because of a lack of funds. The appropriations for the year had been made. In many instances the tax rate was already up to the limit prescribed by law. A higher rate could not be levied until the limitations had been removed. This has been done in several instances, as in the case of first-class districts in Pennsylvania (Pittsburgh and Philadelphia), where the maximum school tax rate was 6 mills. These two cities may now levy not more than 8 mills nor less than 6 for school purposes. Some other cities, as those in Ohio, did not succeed in having the old tax limitation removed. In that State 10 mills is the maximum for all city purposes, only 5 of which are available for the schools. It is thus evident that the chief criticism should not have been hurled at school boards for not increasing salaries. In cases where the maximum amount had been levied school boards borrowed money to increase salaries, but some city boards could not even borrow funds to any considerable amount. This plan, however, could be of only temporary use in any event.

Since the salary problem has been occupying the attention of school boards and superintendents, they have been busy formulating salary schedules which provide for minimum and maximum salaries and methods of advancing teachers from the minimum to the maximum amounts.

In making salary schedules progressive school boards are keeping the following facts and principles in mind:

1. The salary of a teacher at the very least should be enough to provide a living wage, which means that a teacher shall live in comfort, do such reading and studying as are necessary to keep her in touch with progressive movements in education and with the thought of the day on political and social topics, and take part in the social and recreational life of the community. The salary should be sufficient not only for present needs but large enough for a reasonable margin for a savings account.

2. The maximum salary should be sufficient to retain the services of the most desirable teachers. If the maximum is high, it affords an incentive not only to the teachers already in service, but others are

induced to enter when they know that there is an opportunity for advancement to salaries commensurate with those paid in other professions. The minimum should be high enough to induce men and women to make the preparation necessary, but a high maximum makes far better schools than a high minimum and a low maximum.

It should not be necessary for a superior teacher, in order to receive a respectable salary, to be promoted to a principalship or some other administrative position where her talents as teacher will be lost in a measure. For this reason the maximum salary should be almost as high as the salary paid principals, but attainable only by superior teachers.

3. The administration of a salary schedule should stimulate teachers in service to develop to the highest degree whatever teaching power they possess. Advanced educational and professional study and superior work should be recognized and rewarded.

A beginning has been made to hold teachers in the profession by granting larger salaries and by the adoption of schedules that encourage teachers to remain in the service; but it is only a beginning. The salary increases for the year may be sufficient to tide the schools over the term, but unless further increases are made, the standards of city schools will be necessarily lowered, and the boys and girls of to-day will not be so well instructed as those who attended schools a few years ago; and better instruction is needed.

BUILDING OPERATIONS.

During the period of the war the erection of new school buildings ceased. Many schools were already overcrowded, and after the lapse of two years there is scarcely a city in the country where the schools are not congested. More children than ever before attend for a half day and run the streets for the remainder of the time.

The cost of erecting new buildings is practically twice as much as it was several years ago, and many communities hesitate to build. Many cities have erected temporary buildings, but the erection of such has proceeded about as far as is advisable. Some plans must be devised for the children to be housed in permanent buildings. There are only two practical courses open—one is to erect new buildings for the same kind of organization as already exists, with a reserved seat for each child; the other is to organize "duplicate schools" such as are now in operation in 30 or 40 cities in different parts of the country.

In many cities the latter plan could be put into successful operation at less cost than the former and at the same time provide better facilities for a modern school where work, study, and play are each assigned an important place. At Memphis, Tenn., it was found that it would require $3,509,000 to erect enough new school buildings

on the traditional plan to relieve the present congestion in the 13 most crowded schools and to provide for their growth. Under the duplicate plan $2,501,000 would solve the present congestion problem and provide modern educational facilities and a far richer school life for the children.

THE COURSE OF STUDY.

No marked changes have been made in the course of study since the close of the war. During the period of the war school work was vitalized to a certain extent by the practical activities introduced into the schools, as Red Cross work, gardening, Liberty bond campaigns, and lessons in thrift. Some of the activities have been kept up and correlated with other school subjects. Home gardening, directed by the school, has no doubt a permanent place. Thrift teaching is continued. More emphasis is placed on training for citizenship. Physical training and health instruction are also receiving greater emphasis, and many cities have for the first time introduced systematic physical training. What other changes in the course of study this reconstruction period will produce remains to be seen.

The junior high school movement continues. A few years ago there were so few of these that one could name offhand the cities in which they were located. Now the list includes several hundred cities. Wherever there has been any attempt to reorganize the schools, the junior high school has been included in the scheme of organization.

At first this type of school was, to a large extent, merely a regrouping of grades and classes on a departmental plan. Since this organization did not fulfill the purpose of such schools, its curriculum has been changed and modified until it is wider and more flexible and until it more nearly meets the needs and capabilities of children from 12 to 15 years of age. Further modifications are no doubt necessary in many cities in order to make the junior high school serve its purpose. By making haste slowly and by testing each step the junior high school will adapt itself to the American idea of education. It will become an integral part of the school system and not something mechanically thrust in between the elementary grades and the high school.

"Part-time schooling" has during the past year received considerable attention and is now favored by practically all school men. The necessity of working out the details of the plan and of securing the cooperation of employers and similar matters of practical administration have been responsible for the rather slow adoption of the idea.

One of the recent instances of the successful adoption of the part-time plan is that in Pittsburgh, Pa., where arrangements have been

made for part-time courses for commercial students in two of the high schools. The pupils are "paired" and sent on alternate weeks to certain of Pittsburgh's representative firms. One of the department stores gives the pupils opportunities to work behind the counters in selling real merchandise to real customers as well as to write real letters and to handle checks having a face value.

This cooperative plan proved successful in many ways. The pupils had a more practical knowledge of business than if they had been in the classroom all the time and they had as good a theoretical knowledge of their commercial and other subjects. Working in the stores brought up many problems which afforded a motive for attacking the various subjects taught in the classroom. Many boys and girls were saved to the school system. In two months 100 "drop-outs" were turned back into the part-time course.

After one year's trial the school officials and the employers feel so confident as to its value that they are planning to broaden its scope, and to include further cooperation in retail selling. That this plan may be worked out in the best way possible a number of firms have subscribed $160,000 to be used by the Carnegie Institute of Technology to experiment with the cooperative plan under the auspices of the public schools. The research bureau of retail selling of the institute will direct the experiment and will aim to observe and improve the entire cooperative plan.

SCHOOL SURVEYS.

The past year has not been prolific in city school surveys made by agencies other than the United States Bureau of Education. The only city school survey report for the year 1918–19 received at the Bureau of Education was that of Idaho Springs, Colo. This survey was made by the department of education of the University of Colorado. The Bureau of Education made surveys of the city schools of the State of Alabama as a part of a State-wide survey, a comprehensive survey of the schools of Memphis, Tenn., a survey of the school-building problem at Lexington, Ky., and a study of the school finances at Augusta, Ga.

Though the number of surveys for the year was smaller than usual, it is not an indication that the movement is on the decline. Several reasons may be ascribed why fewer surveys were made. The attention of schoolmen was so taken up with war activities and with the dominant idea of winning the war that less attention was given to analyzing conditions with a view to future development. Then, too, school boards realizing that every dollar was needed for the purchase of supplies, which had about doubled in cost and for increasing teachers' salaries, hesitated to appropriate the funds necessary for conducting a thorough school survey.

Plans are maturing in several cities for surveys during the coming year, and the movement has not reached its crest. Among the cities that are contemplating surveys or have definitely decided to have their school systems scientifically studied and reported upon are New York City; Baltimore, Md.; Washington, D. C.; Omaha, Nebr.; Oklahoma City, Okla.; Tucson, Ariz.; Elizabeth City, N. C.; Sherman, Tex.; and Cohasset and Gloucester, Mass.

The most comprehensive city survey undertaken during the year was that of the schools of Memphis, Tenn. The report will be published in seven parts treating the industries and social life of Memphis, school organization, supervision and finance, school buildings, the elementary and the high schools, civic education, science, music, industrial arts, home economics and gardening, and health.

One of the outstanding recommendations of the report is that the schools of Memphis be organized on the work-study-play plan, with duplicate schools in each building. This recommendation was made to show the school board how it could relieve the congested schools without expending the large sum necessary for the erection of entirely new buildings. The main purpose, however, was to suggest a way for providing the kind of schools that the city needs. It is pointed out that the schools of Memphis have been educating its children in the wrong direction, because no opportunity has been offered for play and purposive work.

In order to introduce more play and work, the duplicate-school plan is recommended, which represents an attempt to meet these new problems in education and to make it practicable, both administratively and financially, to provide not only classroom accommodations but also modern educational facilities, as gymnasiums, auditoriums, shops, and laboratories, where children may be kept wholesomely occupied in study and work and play.

The survey of the building problem at Lexington, Ky., resulted in recommendations similar to those made in regard to the building program for Memphis. The report shows how more children may be housed at Lexington if the duplicate plan be adopted.

The principal recommendations made in the survey report on the city schools of the State of Alabama are:

1. That the scope and power of city boards of education be enlarged in general, with specific reference to the following powers:

(*a*) To call elections for the issuance of school bonds.

(*b*) To call elections for the levying of school taxes.

(*c*) To purchase school sites, approve building plans, and erect buildings.

2. That whatever money may be furnished by the State to the city schools should be—

(*a*) Sent directly to the city school boards.

(*b*) Apportioned on some definite basis so that the city may have some idea from year to year as to the amount of financial help it will receive from the State.

The recommendation that the city school boards in Alabama be given more power was made because of the fact that under the Alabama State law the city board of education has very little real authority. It gets its State and county school money from the county board of education and its city money from the city council or commission. It can not buy a school site or erect a school building without obtaining the consent of the city officials. Since the distribution of State and county funds is left to the county board of education, the city board has no way to tell from year to year what amount it will receive. Even the city officials can not call an election to vote city school taxes. The county board of revenue alone has authority to do this. Since the foregoing recommendations were made the State legislature has revised the school law so that the county board of commissioners must call an election at the request of the city board of education, provided the county has levied a school tax of 3 mills.

Other important recommendations regarding the city schools of Alabama relate to school buildings, the course of study, school attendance, and Negro schools.

The survey report of the schools of Idaho Springs, Colo., which may be classed as a village or small town, makes specific recommendations regarding the equipment and the care of the school buildings, the duties of the school board, the program of studies, supervision, and instruction. The recommendations, while made specifically for Idaho Springs, might well be considered by school boards in other small towns.

One point to be noted in the recent city school survey reports is that the recommendations are more definite and constructive than those found in the earlier reports made when the survey was in a purely experimental stage. More standards of comparison are obtainable. More nearly exact measures of instruction are used. That there is still room for improvement is all too evident. One of the weak points in most city school surveys is that but little attention is given to the business department. Instruction is measured by standard tests, improvements necessary in classroom instruction are suggested, the progress of children through the grades is determined, and recommendations made as to methods of reducing the amount of retardation, the course of study is elaborately treated, school building programs are outlined, but methods of purchasing supplies and of checking up the different items of expense incurred by the business department receive meager attention or none.

X. KINDERGARTEN EDUCATION.

EXTENSION WORK IN TEXAS.

An organized campaign for kindergarten extension in Texas was undertaken early in 1919 as the outcome of activities pertaining to "Children's Year." The combined strength of the child-welfare department of the State Council of Defense, the State Federation of Women's Clubs, the State Congress of Mothers, and the kindergarten section of the State Teachers' Association has been directed toward making effective the law enacted by the Texas Legislature in 1917. A fund devoted to child-welfare activities by the child welfare department of the State Council of Defense made it possible to defray the expenses of a field worker for a time, with the result that in a number of Texas cities kindergartens were established for the first time as part of the public school system.

Extension workers in other States are planning to adopt features of the Texas campaign, the formation of a State kindergarten association, cooperation with the State department of education, the employment of a State organizer, and State and district rallies.

LEGISLATION PERTAINING TO KINDERGARTENS.

Arizona.—The influence of the kindergarten movement in California and Texas has made itself felt in Arizona, and a kindergarten law was enacted by the legislature of 1919. The two main provisions of the measure are as follows: (1) Upon petition of the parents or guardians of 15 or more children between the ages of 4½ and 6 years residing within two miles of any elementary school building, the board of school trustees of a district shall "employ proper certificated teachers in kindergarten schools in such elementary school building"; and (2) the board of supervisors of each county is authorized to levy such additional tax upon the taxable property within such school district as will be sufficient to cover the expenses of kindergarten classes.

Changes in Indiana law.—The new law in Indiana includes several improvements upon the former law. State funds for tuition may now be used for kindergartens as well as for other grades of the common schools; the power to levy a tax of 2 cents on the $100 is now extended to incorporated towns and cities of less than 6,000 population; and the turning over of the fund resulting from this tax to a kindergarten association for the support of kindergartens is now left to the discretion of the school authorities.

New school code in Delaware.—A new school code adopted in Delaware gives to county boards of education the power to provide kindergartens.

STATE KINDERGARTEN ASSOCIATIONS.

The formation of State associations of kindergarten workers was provided for by an important amendment to the constitution of the International Kindergarten Union, adopted at the annual meeting in May, 1919. The purpose of the new form of organization is to unite more closely the kindergarten interests in each State and to provide a medium for the investigation of kindergarten conditions and for the promotion and extension of kindergarten interests by adequate publicity, education, and legislation. Local associations in a number of States are already taking action in the direction of State organization.

KINDERGARTENS IN MANY SMALL TOWNS.

In towns and villages of fewer than 2,500 inhabitants there were enrolled in kindergartens, during the school year 1917–18, approximately 21,000 children under the direction of nearly 600 teachers. The leading States for kindergartens in smaller places are Michigan and Wisconsin, with Nebraska, Iowa, and California coming next in order. It is evident that where community ideals are high the small population of a town does not prevent it from providing adequate facilities for the education of its children.

SALARIES OF KINDERGARTEN AND FIRST-GRADE TEACHERS.

A comparison of the salaries of kindergarten and first grade teachers is based upon data compiled from the answers of 72 cities to a questionnaire sent out by the Bureau of Education. The cities are in the following States: Alabama, Arkansas, California, Colorado, Connecticut, Georgia, Indiana, Iowa, Kansas, Louisiana, Maine, Massachusetts, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Texas, Virginia, Washington, and Wisconsin.

The maximum salaries of kindergarten teachers range from $495 to $1,600 a year. These figures represent the salary schedule of 1918. In a number of cities, a new salary schedule goes into effect during 1919 which will bring the range of maximum salaries from $600 to $1,800 a year.

In 31 cities kindergarten and first-grade teachers receive the same salary and teach two sessions with the same hours of classroom work.

In 17 cities kindergarten teachers who teach two sessions, but whose classroom work is from 30 to 90 minutes less than that of the first-grade teacher, receive the same salary as the first-grade teacher.

In 12 cities where the kindergarten teachers have one session and shorter hours of classroom work, they receive a lower maximum salary than the first-grade teachers.

In 17 cities the teachers of the upper grades receive higher salaries than the kindergarten and first-grade teachers. In 13 of these cities kindergarten and first-grade teachers receive the same salary. In one city the kindergarten teacher receives a higher minimum; in three cities the first-grade teachers receive a higher maximum than the kindergarten teachers, but not as high as the upper-grade teachers.

This study indicates that the kindergarten and first-grade positions are on an equal salary basis in the majority of cities.

RETAINING THE NAME "KINDERGARTEN."

A debate upon the change of the name "kindergarten" was one of the features of the International Kindergarten Union convention. The German form of the word was considered to have no bearing on the main question by all those who participated in the debate. It was conceded by those who argued for the change that in pioneer days the significant name had been a means of furthering the growth of the new idea in education. It was claimed, however, that the period was past; that the kindergarten idea had permeated the primary grades with its spirit and methods; and, therefore, that a name more expressive of the integration of kindergarten and school is essential at this time.

Those who argued for the retention of the name claimed that the kindergarten is still in the pioneer period in many places. In many places there are no public-school kindergartens. It is true that the incorporation of the kindergarten as an integral part of elementary education has been achieved in a few private institutions. On the other hand, in some places where public-school kindergartens are established, the traditional practice in the primary grades still persists, and the social aspect of education embodied in the kindergarten has not yet become a part of elementary education. It was argued that the kindergarten can best serve elementary education at this time by continuing to bear a distinctive name as the index of a principle which is steadily becoming the basis of all education.

By an informal vote following the debate, a large majority of those present indicated that at that time they were in favor of retaining the name.

TWO WAR ACTIVITIES CONTINUED.

Two important phases of kindergarten work that were carried on during the war are still furthered by kindergarten teachers through-

out the country. They are Americanization among the foreign-born children and the support of the kindergarten unit in France.

The kindergarten unit in France.—In appreciation of the service rendered by the 15 kindergarten teachers sent by the kindergartners of America to minister to the little French children, Dr. William Palmer Lucas, chief of the children's bureau of the American Red Cross in France, congratulates Miss Curtis, director of the unit, on the record achieved, and says: "Your choice of the personnel and the place they have made for themselves in every community where they have worked is, in my opinion, one of the finest records made in France."

The unit has extended its field in these days of reconstruction by sending traveling kindergarten camionettes, in little Army wagons, to the villages in the Aisne during the summer of 1919. The kindergartners go from village to village, telling stories and playing games with the children, and leaving with them interesting handwork which keeps the children busy and happy until the kindergarten camionette can make its next visit. The French Government has given a camionette to establish the same type of work around Lille, with headquarters at Arras.

In July Miss Curtis with Miss Aborn, president of the International Kindergarten Union, went to Serbia and made arrangements for kindergarten work to be carried on among the neglected children of that country.

Americanization.—The kindergarten has always been an important Americanization agency. Before the war had awakened the whole Nation to the need for Americanization work among the foreign born, the kindergartner was going to the homes of the foreign mothers and giving them friendly help and advice in relation to the customs and institutions of their adopted country and concerning the care and welfare of their children. The foreign women were persuaded to attend mothers' meetings in the kindergarten room, and so were brought into close sympathy with the school.

This social aspect of kindergarten work was carried on more intensively than ever before by the kindergarten teachers during the war period; and in the days of reconstruction the work with the foreign born has been expanded through affiliation with other organizations. In several cities the kindergarten teachers have worked in conjunction with the international institute of the Y. W. C. A. In Chicago and Washington, D. C., kindergarten teachers, because of their special ability, have been appointed directors of the Americanization work of the public schools. In Minneapolis a group of kindergarten teachers have worked in a large Polish district under the direction of the visiting teacher of the public school, making a house-to-house canvass, and bringing information to the school authorities of the

condition of the families in the district. The kindergarten teachers, through their local club, volunteered to do this work. Following their example a group of primary teachers have offered their services.

NEW TENDENCIES IN KINDERGARTEN PRACTICE.

Modern educational theory is bringing about changes in the methods and materials of both the kindergarten and first grade. An inquiry concerning the educational equipment of a modern kindergarten reveals not only interesting changes in the material used but a decided change in methods.

Indoor equipment.—Large material in bulk is replacing a limited number of small blocks in boxes. The use of cloth and wood and other industrial materials is replacing the sewing cards and fine paper weaving mats. Free choice of materials on the part of the child and invention in carrying out his play purposes characterize this type of kindergarten work.

Outdoor equipment.—Emphasis upon out-of-doors' play suggests that a modern kindergarten be equipped with swings, seesaws, balancing boards, slides, and sandpiles, and that when weather permits, other kindergarten activities be carried on out of doors.

Standardization of kindergarten practice.—While a freer method is becoming more general in kindergarten practice, a widespread desire to determine standards for kindergarten procedure has been shown by superintendents, assistant superintendents, supervisors, and teachers. The large demand for the kindergarten curriculum [1] prepared by a committee of the International Kindergarten Union and recently published by the Bureau of Education is an evidence of the fact that a better knowledge of the kindergarten is desired by school people.

CHANGES IN THE ELEMENTARY SCHOOL.

Reports of two committees of the National Council of Primary Education give evidence of the fact that the work of the kindergarten is beginning to affect the first grade. A committee reporting on an adequate equipment for a first-grade room emphasizes the need for movable furniture, a space for games and free dramatization, and the kind of materials that will carry on the processes already begun in the kindergarten. The report of a second committee deals with the time allotment given to the various activities of the primary school and the nature of the work of the between-recitation periods. An increasing emphasis is being placed upon activities in which the children exercise their own initiative instead of having the work of all the periods prescribed by the teacher.

[1] Bul. Bu. of Educ., No. 16, 1919.

A primary curriculum.—Another factor in bringing about a closer organic connection between the kindergarten and the first grade is the appointment of a committee by the Bureau of Education committee of the International Kindergarten Union, who are to prepare a primary curriculum based upon the kindergarten curriculum published by the Bureau of Education.

XI. RURAL EDUCATION.

The loss of teachers to industrial occupations was more widespread and more serious in its effect in the country than in the city. Poorer administrative facilities made quick adjustment more difficult, and salaries had long been lower. Inequality of opportunity in the city and in the country became more apparent. With the concentration of public attention on food production came a new realization of the necessity of improved educational facilities for country children.

The most marked tendencies toward school improvement, as shown by legislation enacted during the year, may be summarized as follows:

1. A general movement toward increased support, State, county, and local, through larger appropriations and higher taxation rates.
2. Better administrative methods for rural schools, characterized chiefly by centralization of authority.
3. Gradual increase of educational qualifications demanded from candidates for teaching certificates, and higher salaries scaled according to qualifications.
4. Efforts toward the equalization of educational opportunities, through increased State appropriations and State aid; provision for increasing the number of rural high schools; various methods of encouraging consolidation of small schools; better measures for enforcing compulsory attendance laws in rural communities, and the like.

MORE EFFECTIVE METHODS OF ADMINISTRATION.

As the importance of providing adequately for the education of rural children is understood, the inefficiency of purely local control and support is realized. A larger unit of administration, preferably one corresponding with the civic unit; State cooperation and financial aid, and more effective and more liberal methods of support are reforms to which the States are turning their attention. Forty-three State legislatures were in session during 1919, and nearly all of them considered some legislation concerned with rural education. Many States passed measures of far-reaching importance, notably Alabama and Delaware, where entire new codes provide for funda-

mentally reorganizing the system of administration and support of schools. West Virginia and Georgia made sweeping changes characterized by school authorities in each State as the "most progressive and comprehensive school legislation enacted at one time" in these States.

In all these cases the leadership in securing the legislation was assumed by the State departments of public instruction, which had put forth constructive programs for legislative adoption. This procedure is in contrast to the usual unsystematic method of adopting new legislation piece by piece, often in conflict with old laws and without proper means of enforcement.

The adoption of the new law for Alabama was the result of a carefully thought out program, and was the culmination of years of work on the part of educators among the people and in previous legislatures for the adoption of progressive ideals. The tendency toward centralization of authority in State and county education departments is noticeable in the legislative enactments of these and other States.

There is a growing recognition of the importance of more extended professional supervision for rural schools. Some States show a new interest in professionalizing State departments by removing them from political influence and the frequent change which accompanies it. Minnesota, New Hampshire, and Delaware have placed the appointment of their chief State officer in the hands of State boards of education composed of laymen, thereby bringing the number of States in which this office is appointed by lay boards up to 10. The law passed in New Hampshire is typical of the best among similar recent laws regarding the appointment of the State superintendent. It provides for a board of five members, all laymen, each with a term of five years, who shall select a superintendent, not necessarily from within the State, and fix his salary and term. The board also controls the whole public-school system, including normal schools. The Indiana Legislature passed a resolution providing for the selection of the State superintendent by appointment instead of by election, a constitutional amendment being necessary in this State. Massachusetts provided for a State school fund of $4,000,000 to supplement the long recognized local support and direction of school matters. The law is a significant departure from traditional practices. It definitely defines the duties and responsibilities of the State department of education and provides a minimum salary for teachers. The New Hampshire law provides for extending supervision and places the responsibility chiefly in the State department. Several other States have provided for better supervision. Colorado and Oklahoma, for example, have added rural-school inspectors or supervisors to the staff of the State department.

A number of State legislatures considered laws for centralizing the administration of schools within the county. Delaware and Arkansas, for example, provided for county boards of education, elected by the people, with general supervision of schools and authority to appoint the county superintendent. In Oregon the county unit of administration was adopted for one county. This law may serve as an opening wedge for a State-wide law. A new law in Iowa provides for the election of county boards of education who are to advise and cooperate with the county superintendent of schools. In Missouri a county unit law failed of adoption by a narrow margin. It had the unanimous support of various educational organizations and will, in the opinion of the State superintendent, be easily successful at the next session of the legislature. The Arkansas law goes into effect in May, 1920, when the first election will be held for county board of education.

The salaries of county superintendents were increased through legislative action in a number of States. Oklahoma, for example, passed a law providing that county superintendents receive the same salary as county clerks. This means an increase in all cases. In Washington, counties were reclassified, giving county superintendents salaries up to $3,600 per year. In Indiana a law was passed permitting boards to increase salaries of county superintendents up to $1,000. More than 30 of the counties have already taken advantage of this privilege. Missouri also raised the salaries of county superintendents, in some cases as much as 50 per cent and as high as $4,000. In New Jersey, all the helping teachers, who are really assistant supervisors, were granted increased salaries.[1]

THE TEACHER SHORTAGE IN RURAL SCHOOLS.

Practically all of the States report serious difficulty in securing teachers for rural schools. A few States made certain concessions in the requirements for certificates or made special regulations for 1919, hoping to raise the standard when the emergency has passed. Among these States are Rhode Island, and New Hampshire. The teacher shortage varies in seriousness, but the situation is in most cases as bad as it was during the war. In some States as many as 90 per cent of the schools are affected. The situation is being met in two ways, by lowering requirements and by increasing salaries. In some cases the salary increase is financed by special legislative provision or State aid; in others, by local effort.

Pennsylvania, New York, and Indiana are among the States which made legislative provision for a State-wide increase in salaries. In Indiana the minimum salary law was changed in such a way as to

[1] For complete information see section on legislation.

grant an increase to all teachers, which averaged about 25 per cent. The new law in Pennsylvania provides for a minimum salary of $60 for teachers holding the lowest grade of certificate. The general raise of all salaries is approximately 25 per cent on the average. The New York law also provides a substantial raise, varying from $100 a year up. According to a statement of the governor of New York the law "establishes the principle of equal pay for women, corrects the present discriminations, and increases the inadequate salaries now paid to members of the teaching staff."

HIGHER QUALIFICATIONS DEMANDED OF TEACHERS.

There is a consistent effort to improve the quality of the teaching force, notwithstanding the prevalent shortage in numbers. This is manifested by increased minimum requirements demanded for teachers' certificates and by the tendency to scale salaries according to the grade of certificate held. It is also apparent in the universal tendency to increase teachers' salaries. The law recently passed in Delaware is an example of the tendency to require gradually increasing qualifications, looking toward an educational requirement equivalent to completion of four years of high school and two years of normal school as prerequisite for any kind of certificate. This standard has already been reached in a few States. Montana, Wisconsin, South Dakota, Delaware, Alabama, and West Virginia are among the States which raised their standards for certification during the year. A constantly growing number of States require high-school graduation and some professional training, varying from six weeks to two years, as prerequisite for the lowest grade of certificate.

HIGH-SCHOOL FACILITIES FOR RURAL CHILDREN.

Both through legislative action and by voluntary effort there is shown a recognition of the necessity for increasing and improving high-school facilities for children in rural communities. A noticeable effort is being made toward adapting school curricula to the needs of rural life by means of the junior high school and other plans. Maine, Wisconsin, Indiana, and West Virginia this year legalized junior high schools somewhat on the plan already successfully followed in Vermont. A new law passed in Indiana provides for the establishment of county high schools under certain conditions. In Michigan a new law provides for State aid of from $600 to $900 for rural agricultural schools, established by consolidating two or more rural schools, and teaching home economics, agriculture, and manual training. This law also provides transportation or boarding expenses for all children who live more than 1 mile from the school. There is in addition State aid of $200 for each vehicle used for trans-

portation of children. Georgia passed a law providing State aid for rural high schools effective in January, 1920.

CONSOLIDATION AND STANDARDIZATION.

There was a steady extension during the year of the consolidation of one and two teacher schools. In spite of the additional cost of buildings and equipment many States strengthened the existing laws for consolidation in various ways. The trend is toward substantial encouragement, generally in the form of State aid. Georgia, for example, passed a law giving $500 to $1,000 from State funds to each consolidated school, according to the number of teachers employed. Pennsylvania pays half the expense of transportation from State funds; Washington increased the State apportionment to consolidated schools employing a superintendent or principal. Some States passed laws legalizing the expense of transportation. Oklahoma gives to consolidated districts an amount equal to one-half the cost of a three or more room building up to $2,500. Several States report a large number of new consolidations during the year. Georgia, for example, reports 68. According to the statement of other State superintendents, the exact number is not available at this time, but marked progress is being made both in the number of consolidations and in the kind of buildings erected. A number of counties, including Randolph County, Ind., and Jefferson County, Ala., are putting into effect a systematic program by which all one-teacher schools are gradually eliminated.

Considerable progress has been made during the year in the effort to standardize rural schools by setting up certain minimum requirements and rewarding their accomplishment by honorable mention, a doorplate, or other insignia, or by a money bonus. In 18 States the plan of standardization is promoted as a policy of the State department. In nine States statutory provision is made. The largest number of standardized schools is reported from Minnesota, which has 6,571. Illinois, Texas, Oregon, Wisconsin, and Missouri follow in the order given. Iowa, through its 1919 legislative session, appropriated $100,000 annually for the promotion of standardization. Reports from State departments indicate that the plan has increased the efficiency of schools in quality of buildings, improved equipment, longer term, and increased salaries.

CONFERENCES AND ASSOCIATIONS.

During the year the Bureau of Education continued its policy of holding sectional rural conferences at selected points. These conferences are attended by representative citizens, business men, State officials, State and county superintendents, educators, and others in-

terested in rural welfare. This year the conferences were held at Oklahoma City, Okla., and Daytona, Fla. Owing to the prevalence of the influenza the conferences scheduled for the fall months of 1918 were abandoned. Other important rural life conferences were held by six of the higher institutions of Texas, by the Iowa State College, and by the North Carolina Normal and Industrial Institute. Certain States, notably Missouri and South Dakota, which had planned extensive campaigns for rural education in the fall of 1918, postponed them until the fall months of 1919. Some of these are now in progress.

The first National Country Life Conference was held at Baltimore January 6 and 7, 1919, called by the committee on country life, of which Kenyon Butterfield is chairman. A number of committees were appointed, among them one on rural education, social life, and recreation. The theme of the conference was "Rural Reconstruction After the War." The committee on morals and religion, of which Dr. Warren H. Wilson is chairman, called a conference of all national organizations engaged in rural social work in Washington March 14 and April 10, 1919. Among the organizations represented were the American Red Cross, Boy Scouts, War Camp Community Service, Jewish Welfare Board, National War Council, Young Men's Christian Association, Young Women's Christian Association, the National Country Life Conference, and the Bureau of Education. This conference discussed educational matters extensively and adopted a program for the improvement of rural schools.

XII. AGRICULTURAL EDUCATION.

AGRICULTURE IN THE COLLEGES.

During the war the American colleges of agriculture placed their facilities at the disposal of the Government for the special training of soldiers. Since that time attention has been given largely to assembling the knowledge resulting from the war experiences. It has been a period of retrospect. No conspicuous modifications in aims and methods of instruction nor marked redirection or enlargement of scope of agricultural curricula have developed, but there is a noticeable shifting of emphasis. The most conspicuous movement is toward requiring an increased proportion of the student's time in the social sciences, particularly economics and sociology. A number of colleges have added newly devised courses which are aimed to develop a deeper spirit of Americanism and more intelligent leadership. An example of the trend in this direction is the course in "relationships" offered by the Kansas State Agricultural College. Such a course is regarded as a suitable sequence to a high-school course in civics, and embraces a wide range of instruction, including

relationships between producer, distributor, and consumer; responsibilities of the individual to the community, the State, and the Nation; and the economics of conservation of natural resources.

The movement toward the establishment of courses for the special training of teachers of agriculture for secondary schools, which was seriously interrupted by the war, has been rapid during the last few months covered by this report. The agricultural college in each State now maintains a teacher-training department, and many institutions are preparing for large enrollments during the coming year. The conspicuous development along this line has been due mainly to the influence of the vocational education act—the so-called Smith-Hughes Act. This has afforded a double stimulus, first, in the direction of increasing the demand for professionally trained agricultural teachers and, second, by the appropriation of funds for the use of teacher-training institutions which are designated by the State boards for vocational education of the respective States. With one exception, the agricultural college in each State has been so designated.

With the development of plans for the special training of teachers of agriculture has come a conviction that prospective teachers must be given an opportunity for practice in teaching under normal conditions and under the direction of experienced teachers. Several schemes have been worked out to bring about the desired result. In many States the facilities for this work are inadequate, while in others very elaborate plans have been developed. While most States recognize the necessity for having a practice high school where agriculture is taught, many of them have come to the conclusion that this alone is not sufficient. There is a marked tendency throughout the country to follow the New York plan, which provides for six months' apprentice teaching under an experienced teacher in one of the agricultural high schools of the State. The prospective teachers accept employment as assistant teachers at a nominal salary. Such practice meets one of the requirements for a degree at the college, and collegiate credit is given for it.

Another movement which has been slowly developing for some time shows signs of making rapid progress as a result of war experiences. The movement aims to broaden the sphere of the agricultural college by the inclusion of all matters relating to the economic use of food and clothing. This trend is emphasized by a recommendation contained in the report of the committee on college organization and policy of the Association of American Agricultural Colleges and Experiment Stations, which reads:

> Your committee believes that the time has come for our agricultural colleges to plan to include in their programs of research, of teaching, and of extension, the entire range of food needs and resources, of food production,

of food distribution, of food manufacture and conservation, as well as the household use of food; and we include all soil-grown products in the province of our activities.

The agricultural colleges, like other higher educational institutions, have suffered severely from their inability to retain their teachers, investigators, and extension workers. Many of the colleges have requested increased appropriations for the purpose of raising salary scales. Some have been successful in their efforts in this direction, but the loss to the colleges, and consequently to the Nation, from changes in personnel has been considerable. The greatest loss has been in the research field. The loss is conspicuous in the number of unfinished projects which new workers, on account of their different qualifications and inclinations, are unable to carry on. The time required for the new workers to familiarize themselves with their new fields represents an additional loss.

One of the fruitful results of the war in relation to the agricultural research program of the colleges is the convincing demonstration that generous and systematic provision for the encouragement of research is an important factor from the standpoint of national prosperity and security. The response on the part of the agricultural experiment stations for information essential to the many emergency problems has stimulated inquiry and discussion as to means for so strengthening and broadening the scope of such institutions as to bring about their maximum efficiency.

The several colleges are endeavoring to maintain their agricultural extension programs at the high level reached during the emergency. Large Federal and State appropriations enabled them to increase their force of workers very largely over the prewar number. While appropriations for the purpose generally have been reduced with the passing of the emergency, the present appropriations are much larger than they were before the war. The scarcity of food, due to the wastage of war and to the necessity for heavy exportations, has directed special attention to this phase of the agricultural college program and has done much to stimulate effort in this direction and to justify this type of education.

Another hopeful sign in the colleges of agriculture is a generous disposition to provide for a closer articulation with the secondary vocational schools of agriculture. The greatest advance in this direction is the attempt on the part of a few institutions to offer in each of the technical departments a basic course which in scope approximates a secondary school course in the corresponding subject. The availability of such courses makes it possible for students who have not had the work in high school to carry it in college, and for those who have had the work in high school to start with more advanced work and without unnecessary repetition.

AGRICULTURE IN THE SECONDARY SCHOOLS.

Rapid progress has been made in the establishment of agricultural high schools, or agricultural departments in high schools, in response to the impetus of the vocational education act. The movement received a serious setback as a result of the war. Most States were able to maintain a large proportion of the schools previously established, but owing to their inability to obtain teachers, they were unable to start new agricultural schools or departments. The work suffered greatly from the necessity of making frequent changes in personnel. In Massachusetts, for example, the change in personnel during the past year is reported to be 80 per cent. Not only in the break in continuity of service has a loss been suffered, but owing to the necessity in many cases for employing teachers without sufficient training and experience, the cause of secondary education has been seriously jeopardized in the communities so affected.

Some States have attempted, with conspicuous success, to make up for the shortcomings of unqualified teachers by the employment of special supervisors or experts for training the teachers after employment. Among the States following this plan may be mentioned Massachusetts, New York, Georgia, Texas, and Illinois. So successful has the undertaking been in the States where it has been tried that many administrative officers believe that it should be continued as a permanent feature of the program for agricultural education in the secondary schools.

A number of other institutions offered emergency courses in connection with their summer schools. The purpose of such courses was to furnish opportunity for persons with teaching experience to obtain a working knowledge of the several phases of technical agriculture.

In the development of plans for the teaching of agriculture in secondary schools two distinct methods have been evolved. One of the plans contemplates the establishment of special schools where agriculture is the central interest. These schools generally are provided with a good deal of land and fairly elaborate farm equipment. The farm serves both as a school laboratory and as a demonstration of farm practice and management. The other plan consists in the establishment of agricultural departments in high schools wherever there is a demand for them. Such schools are seldom supplied with farm lands and equipment, except occasionally a small plat that may be used as a school laboratory. In such a plan the instruction in agriculture centers about the home projects undertaken by the students.

The tendency is decidedly away from the former plan and toward the latter. There is a marked difference in this respect, however, among the several States. In many of the Western and Middle

States the former plan has been highly developed and is giving satisfactory results, while in the East the latter plan is by far the more popular.

AGRICULTURE IN THE RURAL SCHOOLS.

The demand for "something different" in rural education is becoming more and more insistent. Although the demand clearly points toward a program that shall relate itself more intimately to the activities and experiences of everyday life of persons who live in the open country, no working plans which meet the requirements have yet been presented.

Just at the time when prospects looked brightest for a new era in rural education the war came, and following it the great increase in the cost of living which has resulted in driving thousands of rural teachers out of the profession. The places of these, if they have been filled at all, are occupied mainly by persons of insufficient training and of inferior personal qualifications. While there is a Nation-wide campaign for the increase of teachers' salaries, the response has been so insignificant compared with the increased cost of living that it is estimated that there is a shortage of at least 20,500 teachers for rural schools, and that as a result approximately 4,000,000 children in rural districts either will be deprived of school privileges entirely or will be at the mercy of untrained teachers during the coming school year. Such a statement falls far short of telling the whole story, for it does not take into consideration the fact that thousands of children will be forced to depend upon teachers who have had training of a sort entirely unsuited to the needs of rural children.

There is a widespread feeling, therefore, that, important as the problem of redirecting and enriching the rural school curriculum may be, the most urgent problem is to make the work of teaching in rural schools sufficiently alluring to maintain an adequate supply of trained teachers.

XIII. SCHOOL AND HOME GARDENING.

School gardening and school-directed home gardening have made rapid progress during the past year. This has been caused by three factors: First, the shortage of food due to the unusual economic conditions of the World War and the subsequent reconstruction period; second and more important, by the awakening realization by school officers and teachers of the educational value of the subject; third, by the recognition of both of these factors and the support of gardening as a school subject by the National Government.

The expansion has been most rapid in the cities because such centers feel more quickly and keenly a food shortage and the increasing prices of the most necessary things in life. The educational demand has also come from urban communities, because all thoughtful educators realize more readily the full significance of work with the soil and growing plants when this influence is lost to the children through the growth of cities. This outline of garden work of the children of the United States is therefore confined largely to urban communities. The garden reports received at the Bureau of Education represent very largely enrollments in the United States School Garden Army, under which name gardening as a school subject has been advocated. Even where gardening has become a regular part of the school course entire classes have been enrolled in the United States school garden. Class lessons, posters, record blanks, and insignia, furnished by the Bureau of Education, have had a decided influence in popularizing gardening as school work. The plan of organization has helped rather than hindered the incorporation of gardening as a regular part of the school curriculum. The large enrollment in the garden army and the success of the garden work as an educational and productive subject, however, have been due to the conscientious work of school officials and teachers. The number of children reported as receiving instruction in gardening on August 1 is given by States and Territories as follows:

Alabama	24,623
Arizona	1,351
Arkansas	12,607
California	102,542
Colorado	15,123
Connecticut	16,121
District of Columbia	23,630
Florida	7,302
Georgia	16,561
Idaho	2,657
Illinois	284,977
Indiana	144,714
Iowa	19,250
Kansas	33,363
Kentucky	32,462
Louisiana	41,830
Maine	15,339
Maryland	13,267
Massachusetts	51,710
Michigan	66,020
Minnesota	43,762
Mississippi	1,405
Missouri	33,700
Montana	23,963
Nebraska	6,557
Nevada	3,355
New Hampshire	36,656
New Jersey	53,364
New Mexico	350
New York	138,180
North Carolina	13,700
North Dakota	10,952
Ohio	189,660
Oklahoma	105,784
Oregon	2,320
Pennsylvania	86,101
Rhode Island	583
South Carolina	3,100
South Dakota	13,986
Tennessee	20,881
Texas	90,672
Utah	1,552
Vermont	343
Virginia	30,872
Washington	17,750
West Virginia	6,737
Wisconsin	40,563
Wyoming	210
Hawaii	5,900
Philippine Islands	5,934
Porto Rico	100,000
Alaska	2,000
Guam	500

In connection with this list it should be noted that many requests have come voluntarily from rural schools for enrollment in gardening. The percentage of such enrollments has been large in States predominatingly rural, such as Montana, Nevada, New Hampshire, Oklahoma, North Dakota, South Dakota, and Texas. In New Hampshire the State's course of study prescribes gardening as a regular school subject.

No special attempt has been made by the Bureau of Education to foster garden work in rural communities. This distinct province of the work was delegated to the Boys' and Girls' Clubs of the United States Department of Agriculture, as shown by the spirit of the reorganization act of May 8, 1914, as follows: "That the funds shall be allotted annually to each State by the Secretary of Agriculture and paid in the manner hereinbefore provided in the proportion which the rural population of each State bears to the total rural population of all the States, as determined by the preceding Federal census." Promotion of club work under this act is not officially connected with the public school, and thus not all school children are enrolled. Much has been done, however, to arouse rural children to take a real interest in the farm and farm home.

In cities, towns, and villages two types of gardening are recognized—the school garden and the school-directed home garden. The children engaged in both of these types are included in the enrollment by States. The school garden, located on or near the school grounds, is divided into small individual gardens, that each pupil may have his own plat. This was the earliest type of children's garden, but it has been largely replaced by the home garden supervised by the teacher. The individual plat school garden has a place in the congested parts of large cities, but its value is more largely educative than productive. Under the school-directed home-garden plan there may or may not be a garden at the school. In some cases a model garden is planted on the school ground as a concrete illustration of methods of planning, planting, and cultivating a productive home garden. The selection of a home garden near the school as a demonstration is usually more satisfactory. By the school-directed home-garden plan only classroom lessons are taught during school hours. The actual instruction in the demonstration garden and the teaching at the home garden is usually done out of school hours. For the direction of this after-school and vacation work a regular teacher is paid an extra salary. During the past year many teachers have volunteered their services, and credit for the success of the gardening during the year is due to the devotion of many teachers to the subject. From the standpoint of the permanency of gardening, it is encouraging to note that there are more paid garden teachers and supervisors than has ever been the case in the history of the country.

During the present garden season of 1919 some 50,000 teachers directed the work of children who have gardens. The value of this direction depends on the training of the teacher for the work. Many teachers feel the need of additional training and attend the schools which offer practical gardening courses. As the garden work is largely confined to the grammar grades, the logical place for such training is in the State normal schools. Many normal schools have recognized this demand and are now offering special courses in the subject. Noteworthy examples of such courses are to be found in several of the normal schools of Virginia, one in Georgia, and one in Mississippi. In these schools the classroom instruction is strengthened by the use of student practice teachers of home gardening in the public schools of the town where the normal school is located. Many other normal schools have included courses in gardening, but in some cases the teaching is academic rather than practical. The worth of the garden teaching to the public schools is in direct ratio to the training of the teacher.

The value of the products of the many children's gardens has been large, but it has been impossible to obtain a record of all garden results. With the actual results in the Southeastern States as a basis, it has been estimated that the money value of garden products was $48,000,000 in 1919. The returns from a single garden depend on the training of the teacher and the enthusiasm of the child. The average return in a school or a city may be small, but for the Nation the aggregate is large.

That public sentiment is favorable to the incorporation of gardening as a school subject is shown by its indorsement by many local and national organizations. Chambers of commerce, rotary clubs, and other organizations have been influential in creating public sentiment that has made gardening possible in many towns and cities. Active support of gardening under school supervision has been especially indorsed by the Federation of Women's Clubs and the National Council of Women, which includes in its membership the Daughters of the American Revolution, the Ladies of the Maccabees, and many other organizations of a nation-wide scope. These organizations not only pledge their support to the movement, but they also urge the continuation of school supervised gardening until the subject of gardening becomes an integral part of the school course. They have also pledged their assistance in securing a 100 per cent enrollment of the school children in each State. Among the many State Federations that are conducting vigorous campaigns for the establishment of school gardens are those of Illinois, New York, Texas, Michigan, Colorado, New Jersey, Kentucky, Massachusetts, Kansas, Oklahoma, Minnesota, Ohio, and Indiana.

The educational value of school supervised gardening in cities is now coming to be fully recognized. That the city child has little occupation during out-of-school hours and inadequate facilities for play has been proven by many surveys of city school systems. "The idle boy is father to the man without a job; the restless, unsatisfied boy grows up to be the unsatisfied man."

It has been found on investigation that more children are arrested and brought before the juvenile court at about the twelfth year than at any other age. It also happens that this age is the height of the interest period in gardening. While there are other occupations that furnish productive employment for city children, none of them are as easily accessible or well adapted to the children as school directed home gardening.

Shortly before her death Dr. Anna Howard Shaw made the following statement in regard to the education value of gardening to the individual and to the life of a nation:

The question before the public to-day of vital interest to the Nation is the kind of education the children should have in order to make them intelligent citizens.

It is an undisputed fact that the power of the German people for destruction and desire for military power came through years of education and discipline of the children in militarism. The future of our country depends on just what educational methods are pursued here. The question that now confronts America is what kind of education our children should have. The experiences of war taught us that the only form of education adequate to the needs of civilized life is that which demands that the child shall be developed in every phase of his nature—not only the head and hand, but the heart must take its place.

Nothing has brought the children of the country into contact with the needs of the world more than the fact that their aid was asked in the production of food—and that food is of vital importance.

The more we can stimulate this thought in the minds of children, the better it will be, not alone for the material prosperity of the country, by the added value of food production, but also through developing in the child an intimate regard for the soil of his country and his country's prosperity as well as a spirit of thrift and industry.

The terms "mother earth" and "the motherland" will have a new and deeper significance. There will be developed in the child a reverence for country and for the power of service and make him feel that he is a part—and no small part—of the country's being and develop in the Nation itself a knowledge it has failed to grasp that the child is the greatest asset to the country and that his proper education should include a knowledge of how to produce food from the soil.

XIV. TEACHER TRAINING.

The outstanding need of the schools during this year was that of trained teachers. The unusual demand for workers in govern-

mental, economic, and industrial activities resulting from the war caused many teachers to give up their work in the schools. This was due to patriotic and financial causes. No class of workers so intelligent, so well trained, and of such capacity for new work received such low salaries as public-school teachers. The result was that at the opening of schools in September, 1918, there was a shortage of 25,000 teachers in the schools of the country.

Of the 365,000 rural teachers employed in the entire country, at least 122,000 were without teaching experience or professional training. Eighty-seven counties reported a loss of 365 men teachers, and Connecticut reported no men in the rural schools of the State. The total output of teacher-training institutions in the United States is approximately 24,000 per year. Of these, 1,000 are graduates of colleges and normal schools, 11,000 have had limited professional training in these institutions, and 12,000 have been trained in the high-school normal courses.

This supply is inadequate, and various means have been undertaken to meet the emergency. Many States issued temporary certificates to candidates unable to meet the requirements for regular certificates; a general appeal from the Commissioner of Education was issued in which former teachers were urged to return to school service as a patriotic duty. As a result of this, many teachers of experience, particularly married women, were secured for school service; special incentives were provided in the form of bonus or subsidy for those who would continue teaching as well as for those who would undertake training courses for teaching.

As a clearing house for teachers and school boards, the school board service section of the Bureau of Education was created as a war emergency agency, and received support until July, 1919. The States of Iowa and South Carolina during the year established teachers' employment directories, which acted as a clearing house in the respective States.

One of the important movements for better training of teachers was the introduction of the Smith-Towner bill providing for $15,000,000 annually for the improvement of schools through training of teachers. While this bill did not pass in the form presented, it is still before Congress and is receiving widespread consideration. The training of agricultural and vocational teachers has been greatly stimulated by the operation of the Smith-Hughes bill, which provides for the cooperation of the National Government with the States in establishing training school departments for vocational teachers. Such relations have been established in each of the 48 States.

AGENCIES FOR TRAINING TEACHERS.

1. *Normal schools.*—In the 308 normal schools reporting to the Bureau of Education 138,178 students were enrolled, of whom 21,287 were men and 116,887 were women. Of the 24,500 graduates from these institutions, 2,170 were men and 22,331 were women. These 308 schools comprise 172 State normal schools, 34 city normal schools, 45 county normal schools, and 57 private normal schools. A very important factor in teacher training is that of county normal training schools and normal training departments in the high schools of 21 States. The departments and classes number 1,493, with an attendance of approximately 27,000 students and 17,000 graduates.

2. *Training of teachers in service.*—(*a*) Summer schools. The greatest single agency for training teachers in service is the summer school. Its growth has been one of the most significant movements in recent years. The enrollment in summer schools of 1918 compared with 1917 shows a decrease in the number of men in attendance from 6,314 in 1917 to 5,064 in 1918. There was a slight increase in the number of women students, from 48,310 in 1917 to 50,639 in 1918. This shows a total of approximately 1,000 more teachers in attendance in 1918.

(*b*) Better supervision. The problem of supervision of rural schools has been attacked in various ways. Densely populated districts are able to provide a reasonable degree of supervision, but the great majority of rural teachers have little of it. Experiments to overcome the lack have been tried in various sections of the country. In the State of Kentucky 32 white supervisors are employed for work in 24 counties of the State, acting as assistant county superintendents; there are 18 colored supervisors, who assist teachers who are in the service. Another experiment is the supervision of 13 rural schools of Brown County, S. Dak., under a member of the faculty of the Northern Normal and Industrial School of South Dakota. He will visit each of the schools once a month and hold a monthly meeting of all the teachers. Special attention is given to reading, language, spelling, penmanship, and arithmetic. Statistics will be compiled to show to what extent benefit is derived by the schools from that kind of supervision.

(*c*) Reading circles. Thirty-seven States maintain reading circles for the improvement and training of teachers. Professional books form an essential part of all these courses. The National Rural School Teachers Circle provides the courses available to the teachers of all the States, and the Commissioner of Education grants a certificate for the completion of satisfactory work.

PRACTICE TEACHING.

One of the most difficult problems in the training of teachers, and rural teachers in particular, is the opportunity for observation and practice in typical schools. Various plans for rural practice schools in the immediate vicinity of normal schools have been successful to a limited degree. It has become increasingly apparent that more typical schools should be reached. In order to improve this condition several plans have been devised. Nevada, Mo., reports that in their normal training classes for seniors the entire class is sent to country schools for a week of observation and practice teaching. The plan is for the county superintendent to designate a number of schools worthy of study, and furnish the addresses of presidents of school boards and the teachers. After consent is obtained the students are sent to live a week in the community. They observe school work on each Monday, and at some time during the remaining days teach each class at least once. Observation of the student teachers was based on an outline provided in advance. The teachers visited and the country superintendents make reports on the work of the practice teachers. The reports from the student teachers were made in class and formed the basis of discussion of school problems. In other places, teachers are sent from schools by automobiles to the rural schools. One normal school has recently purchased an one-ton truck, which will carry 16 to 20 teachers in training from the normal school to demonstration rural schools for observation and practice.

SUBSIDIZING TEACHER TRAINING.

Various plans have been suggested and put into operation for inducing teachers to take the training necessary for successful work in the profession. New Mexico has provided paid scholarships at three State normal schools. All teachers who have taught one year on a third-grade certificate are eligible. The law provides for payment of railroad fare for all teachers attending at least 60 days at the State normal school. The State of Maine has established a plan by which 100 rural teachers were given additional training at a summer training school located at the Eastern State Normal School. These 100 teachers were selected on a basis of physical and mental ability, and had academic training. They were required to be 21 years of age and to have demonstrated fitness for and sympathy with the rural school work. These 100 teachers were given a course of six weeks' normal training and all their expenses were paid, including railroad fare, board, and laundry, from the time they left home until their return. One major unit of work was pursued intensively for each of the six weeks. In addition, parallel courses in music, drawing, and physical education were had throughout the six weeks.

The work of the units was presented three hours in the morning, and physical education, music, and art occupied the afternoon; two hours were given to industrial work in the evening. The last week was devoted to conferences. Educators of recognized standing were selected as instructors and the courses given included the following:

Unit 1----------Medical pedagogy.
Unit 2----------Knowing the community.
Unit 3----------Practical measurements and elementary surveys.
Unit 4----------Social school and special activity.
Unit 5----------What constitutes a good school.
Unit 6----------Leadership.

These teachers, so trained, will receive for this year a bonus from the State equal to one-fourth of their annual salary. They will act as teachers of model schools and assist the county superintendents in improving school conditions.

New normal schools established included the Second State Normal School, in Indiana, and the Centralia Normal School, in the State of Washington.

XV. TEACHERS' ORGANIZATION.

INTRODUCTORY.

The teachers of the United States are organizing, and the only question is as to what form the organization will take. Events of the past year have presented this problem with unusual clearness. As the National Education Association says in its "Program of service":

> This is a day of organization. The trades are organized. So are the farmers and the business men. Those engaged in the other professions have found it necessary to organize and work collectively in order to accomplish their purposes. Teachers must do likewise if they are to promote their own welfare and advance the interests of their profession.

Hitherto the teachers have kept more or less in isolated groups. They have the gregarious instinct, but their coming together has been rather in numerous sections of the teaching body than in any large, all-inclusive national organization. There were 535 educational associations listed in the Educational Directory of the Bureau of Education for 1918. Of these, 200 were classed as national and sectional, 243 as State associations, 39 as city bodies, and 53 as learned and civic organizations. The membership of practically all of these is made up of teachers, and necessarily overlaps to a considerable degree.

The few associations with claims to national scope have never enrolled more than an exceedingly small percentage of the total

number of teachers. The National Education Association, for years the recognized general association of teachers, prior to 1918 never exceeded an active membership list of 10,000. During the past year the tendency for all teachers to come together on a national movement has been marked. The National Education Association, as a result of a systematic drive for membership, ran its figures up to 24,000 (October, 1919), and the American Federation of Teachers, affiliated with the American Federation of Labor, which had scarcely two dozen "locals" and a thousand or two members on July 1, 1918, a year later had chartered more than 100 local unions and enrolled some 11,000 teachers. These are, however, small numbers, exceedingly small when it is considered that there are approximately 750,000 teachers in various types of educational institutions throughout the United States; and especially small as compared with England, for example, where out of 108,732 certificated teachers, 101,994 are members of the National Union of Teachers.

GROWTH AND REORGANIZATION OF THE NATIONAL EDUCATION ASSOCIATION.

Recent activities of the National Education Association have recognized the need for larger membership and more effective organization. At the Pittsburgh meeting in July, 1918, a program of active service was adopted, and this was aggressively reemphasized at Milwaukee in 1919. According to the declaration of purpose adopted at this meeting, the association will, through its officers, its committees, its publications, and its official staff, exert all its influence to the accomplishment of the following objects:

(1) To secure the enactment of such State and Federal legislation as will give proper recognition and support to public education and provide adequate compensation for teachers; and

(2) To establish and maintain such educational standards with respect to the training and qualifications of teachers, length of school terms and compulsory attendance, sanitary buildings and modern equipment, organization for the elimination of all class distinction and privilege, and the most approved educational policies and methods attainable through the continued investigation and study of educational problems in order that public education shall make the largest possible contribution to the welfare of the community, the State, and the Nation.

The association realizes that to carry out this purpose the teachers "must work collectively." Accordingly, the Milwaukee meeting amended the by-laws of the association to make active membership easier for the classroom teacher. A plan for reorganization of the association to provide for affiliation of State and local bodies of teachers failed for various reasons, some legal and technical, but the idea of a better working cooperation among teachers every-

where was enthusiastically indorsed and has been aggressively carried forward.

A chart recently prepared by the association shows the growth in membership since 1898. In that year there were less than 2,000 regular members, whereas in 1918–19 there were over 24,000 active members, as compared with 10,104 in 1918 and 8,557 in 1917.

The association was active during the war and in the period of reconstruction. A commission on the emergency in education prepared a general educational bill for introduction in Congress, which has since been revised with the help of other organizations, particularly the American Federation of Teachers, and is now definitely before Congress as the Smith-Towner bill, establishing a department of education and Federal aid for education.

During the past year the association has carried on a campaign for better salaries for teachers, and has been particularly successful in enlisting some of the most representative magazines in behalf of better pay for teachers.

THE TEACHERS' UNION MOVEMENT.

Growth of the American Federation of Teachers.—The teachers' union movement may be said to have begun in Chicago in 1912, when teachers of Chicago accepted the assistance of the Chicago Federation of Labor in the fight for more adequate salaries, a fair deal from the city authorities, and better educational conditions generally. The American Federation of Teachers was organized April 15, 1916, and affiliated with the American Federation of Labor on May 9, 1916.

How the affiliation with the labor movement came about is thus described in one of the pamphlets issued by the federation under the heading "Labor Our Ally":

> The American Federation of Teachers came as a result of years of experience on the part of teachers in a dozen cities throughout the country. They found themselves unable to combat with success well-organized influences inimical to the best interests of public education. They had studied the field carefully to discover the strongest democratic force with which they might ally themselves. This force they found in organized labor. Admitting all its imperfections, it is still the greatest single force which recognizes and combats the very influences which are immediately threatening to choke the spirit of democracy in the schools. Condemning as heartily as any the misdeeds of individuals in the labor movement who deserve condemnation for their misrepresentation of the ideals and methods of union labor, these bodies of teachers think they find in union labor's essential altruism and fairness the best hope for America's future. Labor's power is great and destined to be immeasurably greater, and we humbly believe that teachers, cooperating with labor, can give as well as receive.
>
> This view did not originate with nor was it confined to a single group of teachers. Scattered organizations of teachers during more than a decade had requested and obtained charters from the American Federation of Labor.

Gradually these locals learned of each other's existence. Communication sprang up among them and with other like-minded groups. The Chicago Teachers' Federation, as the pioneer and the strongest, led the way to a national organization. Together with the Chicago Federation of Men Teachers and the Chicago Federation of Women High School Teachers they issued the call for action. It was answered by such groups as had been able to weather the storm of opposition raised by those who had cause to dread a union of teachers with labor. New York, Washington, Scranton, Oklahoma City, and Gary joined the three Chicago groups. A constitution was adopted, officers elected, and a charter of affiliation was granted by the American Federation of Labor.

The movement grew rather slowly until 1918. On July 1 of that year there were 23 local unions in the Federation. By May 1, 1919, the number had increased to 72, and on October 1 it was 121, including organizations not only of public-school teachers but of normal school and college and university instructors. Among the higher institutions where teachers' unions have recently been formed are Harvard University, Columbia University, Wellesley College, the University of Illinois, College of the City of New York, Wilson Normal School, Washington, D. C.; Normal University, Normal, Ill.; and the North Dakota Agricultural College.

Aims and purposes.—The object of the American Federation of Teachers, according to the constitution adopted at Pittsburgh, July 5–6, 1918, is—

to bring associations of teachers into relations of mutual assistance and cooperation; to obtain for them all the rights and benefits to which they are entitled; to raise the standard of the teaching profession by securing the conditions essential to the best professional service; and to promote such a democratization of the schools as will enable them better to equip their pupils to take their place in the industrial, social, and political life of the community.

The Federation consists of associations of public-school teachers and of teachers in such endowed institutions as are not conducted "primarily for religious purposes or for private gain." Associations of public-school principals may be admitted to the Federation after the local teachers' union has been in existence two years, provided the teachers' union gives its consent. Any group of seven or more teachers may organize and apply for a charter.

The preamble of the constitution recites as follows:

We believe in democracy, and in the schools as the chief agency of democracy.

We believe that the schools have failed of their fullest attainment because of undemocratic administration, adherence to tradition, and lack of responsiveness to the needs of the community; and that the teachers must find the remedy, if it is to be found.

We believe that servility breeds servility, and that if the schools are to produce free, unafraid men and women, American citizens of the highest type, the teachers must live and work in an atmosphere of freedom and self-respect.

We believe that the teacher is one of the most highly productive of workers, and that the best interests of the schools and of the people demand an intimate contact and an effective cooperation between the teachers and the other workers of the community—upon whom the future of democracy must depend.

Arguments for and against teachers' unions.—Naturally the affiliation of teachers with the organized labor movement has led to considerable animated discussion over the desirability or undesirability of such affiliation. It is frequently argued that teachers' unions might be ordered out on strike. To this the federation replies:

> Under the constitution of the American Federation of Labor the American Federation of Teachers retains complete autonomy. It would be impossible for the American Federation of Labor to order a strike. The constitution of the American Federation of Teachers contains no provision for strikes. In the nature of the case teachers must place their chief dependence on an aroused public opinion and political action.

Another objection is that "Teaching is a profession, not a trade." The teachers' union advocates profess to see nothing in this objection save snobbery.

The one objection that has had most weight with those whose record shows fairness to the teachers is that teachers, as public employees, should not ally themselves with any one section of the public. This assumes, the teachers' union people say, that labor is a section of the public, instead of being, as it is in fact, the public. In American democratic society all are workers, or are assumed to be. Advocates of the teachers' unions point out that teachers are teaching mainly, especially in the cities, the children of the workers who are themselves organized or eligible for organization. Almost without exception, they say, their pupils are the children of workers on wage or salary, and the most that could be expected from a teacher affiliated with labor is that she is likely to find a new interest in the children of all the people.

It should further be said that the right of Government employees to organize and affiliate with labor organizations was specifically acknowledged, so far as Federal employees are concerned, in an act of Congress of 1912.

The federation leaders appear to realize that the argument against affiliation of public employees is perhaps the strongest that can be brought against them. In a pamphlet issued recently they say:

> This proposition, pushed to its logical extremes, would practically disfranchise not only teachers, but all public employees. It would make surrender of the rights of citizenship a condition of public employment. It would forbid membership in any political, religious, fraternal, or social organization.

STATE AND LOCAL ORGANIZATION.

Without regard to the controversy over teachers' unions, the problem before the teachers is clearly one of so organizing as to stimulate the individual teacher units to activity and at the same time create a realization among the teaching body throughout the country that they constitute a great national force. The National Education

Association, organized on a national basis from its inception, is working back to the individual teachers. Hence its "100 per cent campaigns" and its reduction in the cost of active membership. The American Federation of Teachers seeks to have the teachers organize themselves locally first and then apply to the national headquarters for affiliation. Both realize that the salvation of the teaching profession now depends on the individual teachers much more than on the superintendents, and back of these upon the public itself.

It is on the question of enlisting the support of the public that State and local groups of teachers are now having difficulty in finding themselves. Some are organizing State federations of teachers' unions, as in California, in affiliation with the American Federation of Teachers. Others are attempting to transform what is often a moribund or extinct State teachers' association into a live force in cooperation with the new "drive" of the National Education Association. Others, like Cincinnati and Los Angeles, facing frankly the union question, are unable to decide to affiliate with trade-unions, either because of a desire to retain the help of both capital and labor or for other reasons. Thus the Cincinnati Men's High School Teachers' Association recently went on record—

(1) As favoring the formation of a State federation of teachers, which shall embrace in its membership all men and women who are engaged in the actual business of teaching in the public schools of Ohio, and which, in conjunction with other organizations, State and local, shall exercise a direct influence on legislative action looking to the improvement of the schools and the adequate compensation of teachers.

(2) As favoring the immediate organization in Cincinnati of a local representative body of teachers, which shall enlist the cooperation of other similar bodies throughout the State in forming such a federation.

(3) As being opposed, on grounds of public policy, to any formal alliance with special-class interest, whether of capital or of labor.

On the other hand, the California State Federation of Teachers, formed of local unions belonging to the American Federation of Teachers, adopted at its organization meeting, May 31, 1919, the following "professional creed" as its statement of principles and purposes, which shows that it feels that it has everything to hope and nothing to fear from affiliation with labor, so far as the public is concerned:

We believe in universal right education as the chief guaranty of human welfare and progress.

We believe in the dignity of manhood and womanhood, in the essential equality of the sexes, and in children as the hope of the race, for whom the best we have to offer is none too good.

We believe in nonpartisan control of the schools.

We believe in the highest possible standards of professional preparation and work.

We believe in law and order, in reason above force, in cooperation in the spirit of the Golden Rule.

As an organized unit of the American Federation of Teachers, affiliated with the American Federation of Labor, we recognize the brotherhood of brain and brawn.

We believe in the democratization of the schools and in the improvement of the condition of the teacher.

We believe in the conduct of the schools only by persons standing above all partisanship whether of sect or party, clan or clique.

We believe in organic teacher participation in school government in all its phases, but we stand for unselfish service rather than for selfish domination; for giving more than for mere getting.

We believe in the merit system of appointment and promotion, and in equal pay for equal work.

We stand for the schools for democracy, and for more democracy for the schools. And so, with malice toward none, with charity and justice for all, with an eye single to the right as God gives us to see the right, we press forward to achieve better schools for our free citizens and more freedom for the schools of our beloved State.

TEACHERS' UNIONS AND LABOR'S ATTITUDE TOWARD EDUCATION.

That the teachers' union movement has made one contribution few would deny. This is in respect to the attitude of organized labor toward education. Always friendly to the public schools—indeed, with considerable claim to pioneer leadership in creating public schools—organized labor has, through the accession of the teachers, had its educational aims and purposes sharply and specifically defined and has adopted an aggressive, constructive attitude toward accomplishing educational betterment. The St. Paul convention of the American Federation of Labor (June, 1918) went on record as favoring complete reorganization of all types of schools in the interests of all the people, vocational guidance and industrial education in both urban and rural schools, establishment of systems of modern physical education, Federal aid for teachers' salaries, and a Federal department of education headed by a Cabinet officer. The Atlantic City meeting (June, 1919) again adopted a comprehensive program of education, specifically indorsed the Smith-Towner bill as revised after consultation among officers of the American Federation of Labor, the American Federation of Teachers, and the National Education Association, and emphasized the need for protection of teachers everywhere against a tendency to interfere with freedom of teaching.

The constructive influence of teacher union affiliation with labor is further indicated in the section on education of the reconstruction report of the American Federation of Labor, one of the briefest and clearest educational statements in any of the reconstruction programs:

Education must not be for a few, but for all our people. While there is an advanced form of public education in many States, there still remains a lack of adequate educational facilities in several States and communities. The welfare of the Republic demands that public education should be elevated to the highest degree possible. The Government should exercise advisory supervision over public education and where necessary maintain adequate public education through subsidies without giving to the Government power to hamper or interfere with the free development of public education by the several States. It is essential that our system of public education should offer the wage earners' children the opportunity for the fullest possible development. To attain this end State colleges and universities should be developed.

It is also important that the industrial education which is being fostered and developed should have for its purpose not so much training for efficiency in industry as training for life in an industrial society. A full understanding must be had of those principles and activities that are the foundation of all productive efforts. Children should not only become familiar with tools and materials, but they should also receive a thorough knowledge of the principles of human control, of force and matter underlying our industrial relations and sciences. The danger that certain commercial and industrial interests may dominate the character of education must be averted by insisting that the workers shall have equal representation on all boards of education or committees having control over vocational studies and training.

To elevate and advance the interests of the teaching profession and to promote popular and democratic education the right of the teachers to organize and to affiliate with the movement of the organized workers must be recognized.

XVI. HOME EDUCATION.

CONFERENCES ON CHILD WELFARE.

World interest in the welfare of the home has been evidenced by, at least, three great conferences during the spring of 1919. Probably the most important conferences were held under the auspices of the Department of Labor, Children's Bureau, on Standards of Child Welfare. Scientists in many fields of endeavor for human welfare and the upbuilding of the home, public servants, social service technicians, labor leaders, publicists, and physicians, and others who could bring to the conferences scientific methods in approaching child-welfare work were brought together at Washington, New York, Cleveland, Boston, Chicago, Denver, Minneapolis, San Francisco, and Seattle. Among foreign countries sending representatives were Belgium, England, France, Japan, Italy, and Serbia.

Minimum standards of child welfare were outlined. Among the many topics of discussion were economic and social basis for child welfare, child labor, the health of children and mothers, children in need of special care, and standardization of child-welfare laws. The report of the proceedings of the conferences issued by the Children's Bureau is a valuable contribution of this year.

IN SOUTH AMERICA.

The Second American Child Congress which met in Montevideo, Uruguay, in May, 1919, was another important conference. Delegates were present from every South American country and from the United States.

This congress adopted many resolutions of great importance for the care of children in the Western Hemisphere. Among these the following may be taken as of prime importance: Calling for greater vigor in the prosecution by the several countries of the fight against tuberculosis and prophylactic measures for children; compulsory instruction in the schools of America in sanitation, treatment of alcoholism, etc.; material organization of special medical commissions for the detection and treatment of tuberculosis; legal regulation and publication of vital statistics on social, economic, and political grounds; organization in every South American country of preventive measures against child mortality, with systematic reports on each child, weekly for first month, monthly for the first year, and annually up to 3 years of age; organized study of conditions among the proletariat as bearing on infantile mortality; organized instruction of poorer classes in fundamental facts of life, care of children by means of every possible socialized agency; encouragement and establishment of mothers' clubs in all South American centers of population; organized work in sanitation and hygiene with relation to prevention of blindness and deafness of newly born children; systematic attention to dental and oral affections of children.

The section of the congress upon the protection of children adopted resolutions urging (a) the establishment by each country of a directory or general inspection charged with control of all official and private institutions related to care of children; (b) the intrusting of charges relating to protection and hygiene of children only to accredited and qualified persons.

The section on sociology and legislation adopted resolutions urging the prohibition of labor for wages for minors under 15 years of age and of industrial work for minors under 16 years; the limitation of daily hours of work to 6 for minors under 19; the requirement of compulsory school attendance up to the age of 15; prohibiting the employment of minors in work dangerous to life, limb, and health or morals; the strict regulation of work for wages by expectant mothers or those with young children; the establishment of courts for juvenile delinquents, with necessary reform agencies and prohibiting the sending of minors to criminal prisons; the suppression of juvenile delinquency; fostering of health and

mental growth of children as related to the national economic factor; the national furthering of vocational instruction of older children and adolescents; the limitation of the traditional absolute power of the father over the children.

The section of medicine passed resolutions urging the complete identification of medical with sociological and educational reforms, and the systematic medical inspection of national schools, public and private.

The section of education passed resolutions urging compulsory attendance for the period from 8 to 12 years, and in continuation or vocational schools from 12 to 15, and also urging the encouragement of industrial and artistic education, the training of teachers in the moral aspect of hygienic education, recognizing the important and beneficial place of motion pictures in primary education, encouraging worthy and elevating pictures, and demanding the legal prevention of attendance by children on those detrimental to morals, health, and eyesight.

The congress recommended the establishment of a permanent International Association for the Protection of Children, to be officially recognized by all of the countries of South America, and located in the city of Montevideo.

IN FRANCE.

The medical conference of the Inter-Allied Committee of Red Cross Societies was held at Cannes in April for the purpose of outlining some plan for reconstruction of the world's vitality and health. Six sections represented needs of humanity in social welfare, child welfare, nursing, preventive medicine, malaria, tuberculosis, and general venereal disease.

Many problems were discussed, and the committee on child welfare recommended a world-wide child-welfare campaign as the greatest need from an economic and humanitarian standpoint.

Among the problems discussed by this committee were: Saving infants, caring for dependent children, prenatal care of mothers, the education of expectant mothers by well-trained public health nurses, and intelligent cooperation of both parents in the education of their children.

COOPERATION OF HOME AND SCHOOL.

The parent-teacher associations and other organizations doing similar work under different names came into existence through the realization of parents and teachers that they must have some form of cooperation to increase the efficiency of the work of both.

The cooperation thus brought about has produced a more harmonious atmosphere. The parents understand the teachers better, and the teacher understands the children better. The organization

becomes an important factor in the community, and many needs of the school have been filled through the efforts of the parent-teacher associations.

About 8,000 organizations of this sort are in existence, of which 982 are in California, under the National Congress of Mothers; 766 in Virginia, under the direction of the State department of education; 619 in New York; 501 in New Jersey; 394 in Texas; 354 in Illinois; 265 in Kansas; 261 in Wisconsin; and 251 in South Carolina, under the direction of the State department of education. Every State has at least a few organizations working largely for child welfare. Parent-teacher associations are essentially makers of public opinion for righteousness.

XVII. LIBRARY ACTIVITIES.

LIBRARY WAR SERVICE.

During the year the Library War Service of the American Library Association continued actively to supply reading matter for the soldiers and sailors, both at home and abroad. Up to June 1, 1919, the service had shipped overseas 2,561,888 volumes, and had put into use a total of approximately 7,500,000 books since the war began. The fund raised for the work amounted to $5,250,000, and the total personnel employed on June 1, 1919, was 564 persons. This fund includes $3,500,000 assigned to the American Library Association as its share of the sum raised in the United War Work Campaign of November, 1918.

The large libraries operated by the service in the United States numbered 49; overseas libraries, 1,401. In addition, there were numerous small camps, branches, and stations, both at home and abroad. Many hospitals and industrial war-work plants were supplied with books and service, and many transports and other ships equipped with libraries.

The total expenditures of the Library War Service up to June 1, 1919, for buildings and equipment, books and periodicals, service and subsistence, supplies and general equipment, travel, freight, and miscellaneous amounted to $3,330,319.98.

One of the world's greatest library undertakings has thus been successfully accomplished by American librarians. At the Asbury Park meeting of the American Library Association, 1919, a chart was exhibited showing the following comparative library statistics, estimated as nearly as possible: Library of Congress, 2,700,000 volumes; Bibliothèque Nationale, Paris, 3,650,000 volumes; British Museum, 3,900,000 volumes; American Library Association, Library War Service, 7,500,000 volumes.

At a recent meeting of the war-service committee of the American Library Association a definite decision was reached as to the ultimate disposition of books now overseas and in camps and hospitals in the United States. Formal authorization was given for the gift of a reasonable number of books to French and Belgian educational and civic institutions, and to American schools and colleges in other countries, such beneficiaries to be determined by the war-service committee. Gift was also authorized of a certain number of books to the municipality of Beaune, France, and to the American University Union, the Sorbonne, the library of the University of Louvain, the International Institute of Bibliography at Brussels (for the Bureau of International Intercourse), Robert College, in Constantinople, and other cognate institutions in Europe which the association may deem it appropriate to assist, provided that the total of gifts does not exceed 75,000 volumes.

All books and library equipment remaining in the United States after the American Library Association has completed its service to the soldiers and sailors of the war are to be placed at the disposal of the War and Navy Departments for the continuance of library service to the American military and naval peace establishments. Books remaining after the Army and Navy needs have been met will be offered to other Federal institutions, such as prisons, Coast Guards, and lighthouses, and to the United States merchant marine.

Any books remaining after the foregoing disposition are to be distributed as follows. First, to State library commissions, leading libraries—the State libraries, if possible—the State Federations of Women's Clubs, and the State departments of education; and, second, to libraries, schools, and colleges, State charitable and penal institutions, and to traveling library systems, to be designated by the institutions previously named. All these books are to be gifts, not sales, and some return will be required as to the disposal made of them.

The general director was authorized and empowered to dispose of the Library War Service buildings, by gift for library purposes only, or at private sale; also by salvage, either on the initiative of the American Library Association or by joint salvage with some or all of the seven organizations comprising the commission on training-camp activities.

The American Library Association War Service will end October 31, 1919. The war service committee will then make its final report to the executive board and be discharged.

LIBRARY LEGISLATION.

A county library law for Illinois was enacted by the 1919 legislature and went into effect July 1, 1919. The Utah Legislature passed a county library law at its 1919 session and also a law allowing the

municipal library tax of 1 mill to be doubled. One county library has already been established in Utah, and action has also been taken looking toward changing the municipal library at Provo to a county library.

A bill appropriating $6,000 a year for the work of the Georgia library commission was passed by the 1919 legislature of that State. The Georgia library commission was created 22 years ago, but has had no appropriation until now. New Hampshire appropriated $2,000 for each of the years 1919–20 and 1920–21 to carry out the provisions of the library law passed by the legislature of 1917. The State commission will open headquarters at Concord, and an expert will be employed to give her whole time to work with the libraries. The Legislature of Nebraska raised the maximum rate for a library levy from 3 mills to 5 and reduced library boards from nine to five members.

An act to amend and consolidate the law relating to the State library and museum, passed by the Pennsylvania Legislature in May, 1919, gives the exclusive control, supervision, and management of the library and museum to the State librarian and director of the museum, who is to be appointed by the governor, and will have full power in the employment and dismissal of the staff and will receive and disburse all moneys. The board of trustees of the State library is abolished, and the building hereafter comes under the charge and control of the commissioner of public grounds and buildings. There will be the following divisions: General library, law library, public record, library extension, and museum. The library extension division is to take over the work of the free library commission and the commission is abolished.

According to the terms of a consitutional amendment, the 100 State boards and departments in Massachusetts will be consolidated into 20. On December 1, 1919, the free public library commission becomes a division of the department of education, retaining, however, its previous organization and functions.

Beginning with August 1, 1919, the Minnesota State Library Commission terminates its existence as a board, but its work will be continued as a division of the department of education.

The changes mentioned in Pennsylvania, Massachusetts, and Minnesota illustrate the present tendency to consolidate all State educational activities into single departments.

AMERICAN LIBRARY ASSOCIATION MEETING.

The forty-first conference of the American Library Association was held at Asbury Park, N. J., June 23–28, 1919. Nearly 1,200 members registered, which was about double the attendance at the

Saratoga Springs conference of 1918. The officers elected for the coming year were the following: President, Chalmers Hadley, librarian Denver Public Library; first vice president, George H. Locke, librarian Toronto Public Library; second vice president, Cornelia Marvin, librarian Oregon State Library. The meeting of the association in 1920 is to be held at Colorado Springs, Colo.

Particular attention was given on the program to the Library War Service. Its report for the year ending June 30 was received and adopted.

The report of the committee to investigate salaries was summarized in four sections, dealing with city and county libraries; college and university libraries; State, mercantile, and endowed libraries; and Government department libraries, respectively. The returns show a low average of compensation for library workers in all branches, and resolutions were passed strongly urging increased appropriations to remedy this condition.

One general session of the conference was devoted to the topic, "The future of library work in America." At this session papers were presented on the following topics: The library's task in reconstruction; The high-school library of the next decade; and Reaching all classes of the community.

The Smith-Towner bill for the creation of a department of education was brought to the notice of the meeting and discussed. Particular attention was directed to the clause in the bill making provision for the extension and adoption of public libraries for educational purposes. A motion to indorse the bill made by Chalmers Hadley was adopted by the association. A resolution was also adopted indorsing the work of the National Library Service and requesting its continuance in the Bureau of Education.

At a meeting of the council the desirability and possibility of raising a permanent endowment fund for the peace-time work of the American Library Association was discussed with considerable fullness. It was decided to request of the executive board the appointment of a committee to take into consideration the entire subject of enlarged service and report within a year.

PROPOSED SURVEY OF AMERICAN LIBRARIES.

The leaders of the American Library Association are resolved that the momentum gained by the corporate activities of the association in war work must be carried over into peace times and that the association must now continue to work as a unit for the benefit of all libraries and of communities having no libraries. In preparation for this new peace work a preliminary survey of library conditions in the United States seemed necessary, and accordingly was authorized by the executive board of the American Library Associa-

tion in January, 1919, and intrusted to a committee of five on library service, with the following membership: Arthur E. Bostwick, St. Louis Public Library, chairman; Linda A. Eastman, Cleveland Public Library; Carl H. Milam, Library War Service, Washington, D. C.; Azariah S. Root, Oberlin College Library; and C. C. Williamson, New York Public Library. The committee was charged with the duty of determining the actual conditions of American libraries to-day, their incomes, property, staffs, salaries, methods, and practice. The survey report should then present standards for libraries—standards of equipment, buildings, service of all sorts, salaries, and income. It will do for libraries what the Carnegie Foundation has done for legal and medical education, and will be analogous to the reports on elementary and secondary education made by committees of the National Education Association. In a way it will be a bringing up to date of the report on Public Libraries in the United States—Their History, Condition, and Management, published by the Bureau of Education in 1876.

A preliminary report on the proposed survey was presented by the committee to the meeting of the American Library Association in June, 1919. The plan is to send out one questionnaire, the answers to which, when arranged and classified, shall constitute a body of definitely ascertained facts regarding the work done by American libraries. A consideration of methods of extension work is then to be based on the results of the survey.

The matter of the proposed survey was also brought before the council of the American Library Association at the Asbury Park meeting, 1919. The chairman of the committee, Dr. A. E. Bostwick, presented the topic, "An adequate library survey: What it would accomplish, what it involves, and what it will cost." He submitted a proposed plan of work for ascertaining what libraries are now doing over the United States, a program which would cover two years of continuous work, and requiring the services of a director with an assistant and clerical force, at an estimated cost of about $88,000 for the two years. Dr. Bostwick said the work is going to be done whether this appropriation is made or not, but will not be completed with the necessary thoroughness if it has to be done by volunteers in odd hours.

After some discussion of the proposed survey by members of the council, the committee was continued to report further at a subsequent meeting.

THE A. L. A. ENLARGED PROGRAM.

At a meeting of the executive board of the American Library Association, held at Asbury Park, N. J., June 27, 1919, the following resolution was unanimously adopted:

Resolved, (1) That the executive board recognizes the responsibility of the American Library Association to encourage and promote the development of library service for every man, woman, and child in America.

(2) That a committee be appointed to consider the various reports and suggestions concerning the future work of the association; to prepare an enlarged program of American library service; and to make a report as soon as possible with recommendations—these recommendations to indicate which features of the program are of immediate importance and to be accompanied by definite plans for inaugurating and financing the work.

(3) That this committee consist of two members of the executive board, who shall have power to increase their numbers to five and to appoint advisory subcommittees.

(4) That the committee be known as the committee on an enlarged program for American library service.

The members of the committee for an enlarged program are Frank P. Hill, chairman; Carl H. Milam, John Cotton Dana, Walter L. Brown, and Caroline F. Webster. A tentative report from this committee was presented to the executive board of the American Library Association at a session held at Richfield Springs, N. Y., during the week of September 8, 1919, on the occasion of the meeting of the New York Library Association. The report, which was accepted and approved by the executive board, provides for the continuance of certain features of library war service, and for the extension of the work to include many new features. It is expected that balances in the hands of the war service committee will suffice to continue the war service, and that additional funds for carrying on the new work for four or five years will be raised by popular subscription in a financial campaign next spring.

The following is an outline of the principal features of the report on an enlarged program for the American Library Association:

The War Department has appointed a director of Army libraries and is taking over that portion of the Library War Service work which concerns the Regular Army. The American Library Association is transferring to the department a large part of its books, buildings, and personnel. The work is to be carried on by the War Department with Government funds, and with such additional funds as may be available from the American Library Association balance. A consulting librarian has been appointed for the Navy at American Library Association expense, and it is hoped that sufficient funds will be available from the Government and from the Library War Service balance to enable the continuance of work for this branch. Other groups now coming under Library War Service for which the American Library Association plans to continue to provide books are the following: Public Health Service hospitals, which contain many ex-service men and men from the merchant marine; blinded soldiers, sailors, and marines, to be aided by the publication of additional books in Braille type for their use; Coast Guards and Lighthouse

Service; United States Shipping Board and other merchant vessels; industrial plants under Federal control; discharged soldiers, sailors, and marines.

The second part of the report takes up the enlarged civilian service proposed for the American Library Association. The report asserts that the American Library Association should have the functions of a national library commission, so that from its executive office active field workers may be sent to the aid of any State that is seeking to create a State center or agency for library propaganda and library service. Where there is a State library association, it should have the cooperation of the American Library Association in securing the needed legislation. In cases also where large cities are noticeably lacking in library facilities, the American Library Association should help in the establishment of a public library by a campaign of education.

The committee further recommends that the executive board appoint a national library examining board of three members, to hold examinations and grant certificates for library service to properly qualified candidates in grades A, B, and C.

The committee also asks that an item be placed in its budget for the enlarged program, for a library survey, and that this survey include a review of the place of the library in the social and educational life of America, with special reference to the promotion and direction of reading both by libraries and by other agencies, including educational institutions, periodicals, publishers, booksellers, and advertisers.

It is further recommended that the American Library Association undertake a nation-wide promulgation of the library idea, designed to stimulate the extension and development of libraries, and to increase the use of print, this end to be accomplished by all manner of publicity work.

Another recommendation is that the American Library Association spend a certain portion of its income for bibliographical work in the interest of learning. In this connection, the international bibliography of humanistic literature proposed by Prof. F. J. Teggart, of the University of California, would receive the first attention. Consideration of a possible general extension of the publishing activities of the American Library Association was also advised.

With reference to National Library Service, the committee recommends that the American Library Association go on record as favoring the taking over of practically all the proposed items in its enlarged program by governmental or other organizations (such as the National Marine League) whenever they are willing and able to do so. It also favors the taking over by the Government of such work of the association as might be included in the functions of a national

library commission or any part of that work such as would be transacted by the proposed National Library Service.

A statement showing that librarians "have acted in no small degree as leaders in the movement for better citizenship" was prepared, and it is recommended "that it be widely distributed among and in libraries, and that the executive board urge that this work be continued and extended." This includes the Americanization work of libraries.

It is also declared by the committee to be—

a proper function for the American Library Association to serve as a clearing house of information to the public by assembling at its headquarters office the names of institutions and individuals willing to furnish specialized knowledge, and by its ability and willingness to refer inquirers to available sources of information.

The American Library Association should also, in the judgment of the committee, consider library work in hospitals and in other State, city, and Federal institutions a part of its peace-time program.

The effective carrying out of the new program seemed to the committee and the board to require some changes in the present constitution of the American Library Association. A draft of a revised constitution for the association was accordingly presented. The suggestions made have been passed on to the special committee of the executive board on constitution and by-laws for consideration.

The executive board in session at Richfield Springs, N. Y., authorized the committee on enlarged program to make plans for a financial campaign for $2,000,000 to be raised by popular subscription. The committee was instructed to make further investigation and report at the midwinter meeting in Chicago.

The death of Andrew Carnegie on August 11, 1919, removed the largest single benefactor to the library cause in recent years. Mr. Carnegie's gifts to the cause in the United States amounted to $60,364,888 for 2,811 public-library buildings, and $4,165,699 for library buildings for colleges and universities. He also provided for the continuance of his benefactions after his death by founding and endowing the Carnegie Corporation.

XVIII. EDUCATIONAL LEGISLATION.

The legislatures of all the States except those of Kentucky, Louisiana, Maryland, Mississippi, and Virginia were in regular session in 1919, and a vast amount of educational legislation found its way to the statute books. The two general types of enactments—those reflecting important educational movements or tendencies and those designed merely to amend and strengthen existing law at weak points—were in evidence in 1919, as in previous years. The effort

here is to survey briefly the field of the former type and to show something of the extent to which legislative bodies have responded to the new demands.

EFFECTS OF THE WAR.

The effects of the war upon school law, which were apparent as early as 1917 and so continued throughout the legislative sessions of 1918, were equally marked in 1919. But the student of tendencies in education is too close in point of time to permit proper perspective in appraising these effects. With the proclamation of peace still in the future and many adjustments yet to be made before normal conditions are restored, the limitations of one's insight into cause and effect in educational tendencies are palpable. That a "new spirit in education" has taken hold of the country is not hard to see, but the interpretation of this spirit is difficult. For the purposes of the reviewer of school legislation, however, it will suffice to give only secondary consideration to underlying causes and then pass on to practical effects as seen in the laws enacted.

A NATIONAL INTEREST IN EDUCATION.

The one autstanding fact seen in the enactments of the year is the effort to make the schools serve America as a nation more effectively. This does not mean that the motive in education is to pass from the community and the State to the Nation, for the former are to retain their interests and continue to receive the usual benefits, but that a more vigorous national interest is now added. The individual is to be made a more efficient social and economic unit for the community and State not only, but for the Nation as well. The boy is to be no less a good New Yorker, Nebraskan, or Carolinian, as the case may be, but is to be made a better American. This broadening of the view with regard to education has been going on for a long time, but it is only since the outbreak of the war that many people have come to think of serving the whole of America by education of the individual wherever he may live and whatever may be his station.

Out of this nationalistic idea of education several tendencies have emerged or received new emphasis. That future citizens must have better mental preparation, stronger bodies, and a keener sense of patriotic obligation than their parents have had is now a widespread conviction, and this is being translated into new aims in educational tendencies. Out of it have come the more insistent cries for "better schools of all kinds," "physical education," "Americanization," and other means of improvement. The appearance of thousands of men at military camps with little or no education, the discovery of other thousands with physical defects which might have been averted by means of better care and training in earlier life, and the outbreak

of a vicious un-American spirit in some quarters and among some classes at the time of our entry into the war were fruitful of lessons which could hardly go unheeded. Though these lessons have probably not been thoroughly understood by all State legislators, they have worked out wholesome effects in legislation nevertheless.

JUSTICE TO THE WEAK.

Another result of the war, a result which had its roots in the spirit of America in taking up arms, is the new spirit of justice to the weak. To "make the world safe for democracy" was the entering slogan, and underlying this was a strong feeling in the American mind that force was trying to impinge itself as the proper ruling element upon the world; that might was trying to make right. Against such an effort as this America was bound to throw itself, for democracy and justice must always oppose this doctrine of might. The effect of the new American spirit upon America itself was soon apparent. If we were impelled to oppose the encroachment of the strong upon the weak in international affairs, it naturally followed that the strong owe a duty to the weak within our own borders, and this principle came to be seen as never before. Translated into educational legislation, it appeared in the form of largely increased State participation in the support of schools, more liberal provisions for negro education, and better measures for child welfare. The effort to obtain the passage by Congress of a law providing for a Federal department of education and Federal aid to the States for the benefit of the common schools had its impulse from this principle as well as from the new nationalistic idea. It was, in fact, on this principle that one of the chief proponents of the so-called "N. E. A. Bill"—Dr. J. Y. Joyner, State superintendent of public instruction of North Carolina and former president of the National Education Association—based his plea for Federal aid to the common schools when he appeared before the United States Senate Committee on Education and Labor, December 5, 1918. At that time Dr. Joyner said: "Isn't this the foundation of all public education in a democracy, that all the strong in a State must help all the weak in the State to make the most possible of themselves, and stimulate through that help all the weak of the State to help themselves in proportion to their ability to do it?" And, continuing, he asked if this principle is not applicable to the Nation as well as to the State.

A WIDER HORIZON AND LARGER IDEAS.

Still a third result of the war was what might be called a by-product of the war spirit. When the country once decided to resort to arms it went in with a determination that involved the use, if nec-

essary, of all the man power and other resources available. It began to do things on an unprecedented scale and continued to do so to the time of the signing of the armistice. Never before had the people thought in terms of an Army of 4,000,000 American men on a European battle field, of a Government bond issue of $5,000,000,000 at one time, or of national control and supervision, from a few central offices in Washington, of practically all the manufacturing and transportation facilities of the country. And yet these things were now happening. The result was a new habit of thinking in the popular mind. The people became accustomed to thinking and doing big things, and such as the "oversubscription" of a hitherto impossible "quota" was a common occurrence. A hundred million dollars was raised for the Red Cross, and over $200,000,000 was later subscribed for the War Camp Community Service and allied organizations. Nor did the doing of big things stop with the signing of the armistice. In the legislatures of 1919 the new spirit was seen in several phases, but perhaps most of all in provisions for highway construction. Only a few years ago a proposal to bond the average State for a few million dollars for the purpose of building roads would have met so much opposition as to bring ridicule upon it, but in 1919 a like proposal, but involving as much as $25,000,000, or even more, was often received with favor, and some legislatures made such provisions apparently with no great hesitation. This new disposition to large undertakings was hardly less noticeable in education. Here it took several forms. In Massachusetts, for example, a State distributive school fund of $4,000,000 was provided by the legislature; in Georgia what the State superintendent characterized as the "best educational legislation in a generation" was enacted; and in Alabama a commission was created to make a survey of the entire State school system, and on receiving its report, the legislature undertook to effect a great increase in the public revenues and to revise and well-nigh write anew its whole body of school law.

In noting the war's effects on educational legislation it is not the purpose here to defend or condone war; it is rather the purpose to point out that the spirit which actuated the American people in taking up arms has reacted upon themselves and their institutions to good effect. That the spirit of Americanism, of justice to the weak, and of determination to do things on a still larger scale would all have their effects upon our internal affairs was inevitable; and that education came in for a share of the benefits should be gratifying to everyone.

It should not be claimed, however, that the war spirit is creditable with all recent important movements in education. On the contrary, several wholesome tendencies which have been evident for a number of years are seen in the legislation of 1919. Among these are the

growth of the county-unit plan of school administration, the extension of county libraries, increased provision for vocational education and for part-time and evening classes, the strengthening of compulsory attendance laws, the improvement of teacher-training facilities particularly in high schools, the removal of professional educational positions from the influence of partisan politics, and the better organization of State and local school administrative boards.

Passing now to more detailed notice of the enactments of 1919, the student of the subject is at once confronted with a mass of legislation manifestly too large to admit of extensive treatment here. It must suffice, therefore, to notice only the more important classes of enactments and to indicate the main provisions of some of those that may be considered typical.

NEW SCHOOL CODES.

One of the first things to attract the attention of the student of the school legislation of 1919 is the "new school code." The Legislatures of Alabama, Delaware, Georgia, and West Virginia enacted laws of this kind. Such an act is generally designed completely to revise and harmonize the whole body of the State's school law. The outstanding features of the Alabama law are the abolishment of several State boards having to do with particular branches of educational activity and the creation of a central State board of education to have general control and supervision of the public schools, including high schools and institutions for training teachers; a clearer definition of the powers of county boards of education and of provisions for school taxes and bond issues; the creation of a State council of education to "coordinate the educational efforts" of the State institutions of higher learning; the extension of the application of the compulsory attendance law; and the increase of funds for secondary schools, both academic and vocational.

In the Delaware code the school law is harmonized in general, and the powers and functions of the State board of education and of county boards are more clearly defined and somewhat enlarged. One of the more important changes made by this law is in the provision for the appointment of the State commissioner of education by the State board. This officer was formerly appointed by the governor.

The "new code" of Georgia provides for the application of one-half of the income from State taxes to the support of the schools, State supervision of schoolhouse construction, extension of high-school education, more rigid attendance requirements, the issuance of county and district school bonds, membership of the State superintendent on boards of trustees of State institutions of higher learning, and regulation of degree-conferring institutions.

In West Virginia, a consolidation of boards similar to that in Alabama was effected, the State distributive school fund was increased, more local school revenue was provided for, the minimum salaries that may be paid teachers were raised, the school term was made longer, and the application of the compulsory attendance law was extended. Another noteworthy provision of this law was the increase of salaries of State and county superintendents.

REORGANIZED STATE DEPARTMENTS.

Another class of prominent enactments in the legislation of 1919 was that having to do with the organization of State departments of education. In addition to States already mentioned, Massachusetts, New Hampshire, Connecticut, Minnesota, Montana, and a few others enacted laws coming under this head. In Massachusetts the State board of education as formerly constituted was abolished and a board was created to serve in an advisory capacity to the commissioner of education. The education department is placed under the general supervision and control of the commissioner, and he is also made a member of the board of trustees of the Massachusetts Agricultural College.

The New Hampshire Legislature passed "an act in amendment of the laws relating to the public schools and establishing a State board of education." The board consists of the governor and five members appointed by him. It is given the "same powers of management, supervision, and direction over all public schools in the State as the directors of the ordinary business corporation have over the business of the corporation, except as its powers and duties may be limited by law." Other powers conferred include cooperation with the Federal Government in educational endeavor, prescription of the qualifications of school superintendents and teachers, and the employment of a commissioner of education as the board's chief executive officer.

In Connecticut provision was made for the reorganization of the State board of education. The board now consists of the governor and lieutenant governor, ex officio, and nine other members appointed by the governor. It is authorized to appoint a secretary, an assistant secretary, and other agents and subordinates.

The Minnesota law provides for a State board to consist of five representative citizens and prescribes its powers and duties, among which are the appointment of a commissioner of education, a deputy commissioner, and several heads of departments and other assistants.

The Montana act confers additional powers upon the existing State board, provides for State certification of teachers, authorizes the establishment of part-time and evening classes for persons over 21 years of age, and otherwise revises the school law.

INCREASED STATE PARTICIPATION IN SCHOOL SUPPORT.

Reference has already been made to increased State participation in public-school support. The tendency in this direction has been noticeable for some time, but has been more marked during the last two or three years than formerly. Some may hold that the State is already doing its share in this respect, and in a case like that of New Jersey or Texas where the State as such is paying nearly one-half of the cost of the schools this may be true, but that it is true throughout the country is hardly tenable. The equalization of the burden of school support and of the opportunities afforded by the schools can be accomplished in no other way as efficiently as by State contribution.

Among the States which in 1919 provided for increases in their contributions to the schools were Georgia, Iowa, Massachusetts, Pennsylvania, South Carolina, Texas, Utah, and West Virginia. In Iowa, State aid for consolidated schools was increased from $100,000 to $150,000. Pennsylvania also provided aid for consolidation and increased its appropriation for the general school budget. South Carolina provided State aid for weak districts, and the Texas Legislature appropriated $2,000,000 annually for rural schools. A very liberal provision is made in an amendment to the constitution of Utah which was proposed at the last session of the legislature of that State. If ratified by the people, this amendment will permit a State school levy sufficiently high to raise an amount annually which, added to other State funds available, will equal $25 per capita of persons of school age.

COUNTY ADMINISTRATION.

From the viewpoint of county administration, there was hardly so much legislation in 1919 as in some previous years, nor so much as in the field of State administration. There was, however, considerable attention given by legislators to county matters. The "county unit" was in the forefront in some legislatures, and a few enactments on the subject came through as law. Probably the most noteworthy of these acts was that of Arkansas, where a county-unit law, State-wide in application, was enacted. It provides for the election of county school boards by the people, and for the election of county superintendents by the county boards. The law, however, does not become operative until 1920. It provides for the county plan of organization in modified form. The county boards are not authorized to interfere in any way with local district boards, but are expected to cooperate with and assist the local authorities.

The Delaware law of 1919 also provides for the county plan in modified form. This form of organization is not new in that State,

for county boards of education existed under the older law, but the new code defines their functions more clearly and extends their powers. The superintendent of schools, formerly appointed by the governor, is now appointed by the county board of education. Three other States in 1919 made what may be considered beginnings with the county unit. These were Iowa, Montana, and Oregon. In the first of these, county boards of education are provided for and their principal duties outlined. These duties are (1) to select textbooks in counties having county uniformity, (2) to pass on boundaries of proposed consolidated districts in case of appeal from the county superintendent, and (3) to advise with the county superintendent in matters referred by him. In Montana an optional county plan is provided for third-class districts, and in Oregon, any county having 25,000 or more persons of school age is constituted a county school district under the supervision and control of a county board, but existing school districts of the first class are not to be included in the new organization. On the whole the county unit made progress in 1919, but the laws enacted generally made provision for the modified form of organization. In one case there was a veering away somewhat from the stronger form, the Alabama Legislature authorized district boards to reject assignments of teachers to their respective schools.

In connection with county administration it may be noted that legislative attention given to county superintendents in 1919 showed the usual recent tendencies. In general, salaries were increased, assistants were provided, and the payment of expenses from public funds was authorized.

The principal item of progress seen in legislation affecting the school district was the continued upward trend of tax limits. Many States revised their tax laws, and in the matter of school taxes the tendency generally was to permit the authorities to make larger levies. The Indiana Legislature amended an act of 1903 by raising from 50 cents to 75 cents on $100 the maximum levy that may be made in townships, towns, and cities for the purpose of providing a "supplementary tuition fund" to extend the terms of schools after the apportionment from the State tuition revenues is exhausted.

A North Dakota act of 1919 affords an example—of which there are several in the country—of high local school taxation. Under the provisions of this act each district school board is empowered to levy for school purposes of all kinds authorized by law a tax not to exceed in the aggregate 30 mills on the dollar in any year, but whenever there are past due warrants outstanding in the district, the board may make an additional levy not to exceed 20 mills on the dollar.

A Pennsylvania act increases permissible tax levies in districts of the first class—Philadelphia and Pittsburgh. These districts may now levy a school tax of not more than 8 mills and may thereby provide needed increments to teachers' salaries and otherwise meet the demands for more school funds.

TEACHERS' SALARIES.

With regard to teachers' salaries, there are several items of school legislation that are pertinent. The principal impulse to increase in taxes springs from recognition of the injustice of prevailing wages paid teachers, or at least from the knowledge that the good teacher will quit the profession and enter some other pursuit if more adequate pay is not forthcoming. Perhaps the principal increment to teachers' wages will be found finally in increases of taxes, but the problem was attacked from other angles in a number of legislatures. Minimum salary laws were enacted in several States. Indiana and a few other States have laws in which the lowest permissible salary is based on the grades made in the examination and the amount of experience which the teacher has had. An Indiana act of 1919 increases minimum salaries in that State by an amount estimated to be about 25 per cent. But most of the recent laws of the group here considered fix a minimum that must be paid for the month or the year. In New Jersey, for example, it is unlawful under an act of 1919 to pay a teacher less than $70 per month. The new code of West Virginia raises from $50 to $75 the minimum monthly salary of holders of first-grade certificates, and teachers of lower grade are similarly protected. A New York act provides minimum salaries for teachers employed in cities and for annual increments thereto. It also increases salaries of teachers outside of cities in the sum of $100 each over the amount paid in the school year 1918–19 and appropriates money from State funds for reimbursing districts for such increases. In Montana and Texas the "equal-pay" question was considered, and provision was made for like compensation for men and women doing the same grade of work.

RETIREMENT FUNDS.

The retirement of superannuated teachers and teachers disabled in service, now become a constant subject of legislation, was considered by several of the legislatures of 1919, and Arizona, New Jersey, Vermont, and some other States included it in their legislative programs. The new law of New Jersey is among the more noteworthy of these enactments. By joint resolution of February 23, 1918, the legislature of that State provided for the appointment of a commission "to investigate the subject of municipal, county, and State pensions and the teachers' retirement fund." This commis-

sion was accordingly appointed and made its report January 14, 1919. The report embodied the results of a critical and constructive study of such matters as rates of teachers' contributions, amounts which certain specified contributions may be expected to produce in a given period of time, annuities, which may be safely based on proposed resources, and actuarial phases of the subject. A proposed act providing for the establishment of a teachers' pension and retirement fund was outlined in the report. Pursuant to the findings of the commission, the legislature of 1919 enacted a law designed to displace the older laws on the subject and to establish teachers' pensions on a sound actuarial basis. The new plan involves contributions of teachers and appropriations of State funds. The most important phase of recent pension legislation is the effort to make retirement systems actuarially sound, and New Jersey's effort in this direction has been among the most thorough in the country.

Other matters affecting the teaching staff present no especially noteworthy features for discussion under the head of school legislation. The trend toward raising the qualifications of teachers and defining more clearly the several types of teaching service was noticeable in the enactments of 1919, as in those of former years. The training of teachers was as usual the subject of considerable legislation in the past year. What appears to be a new emphasis in teacher-training is indicated by the provisions in some States, as for example in Maine, for additional educational opportunities for those already in the teaching service.

IMPROVED RURAL SCHOOLS.

The insistent demand for school improvement in every possible way is nowhere more marked than in the interest of the rural school. This subject is discussed elsewhere in this report and some notice is given to agricultural training and other aspects of country life, but there is one feature of rural-school improvement which may be noticed here, since it has been the subject of considerable legislation within the past few years. It is the effort to fix standard types for schools and to promote the standardization of as many of the schools as possible. The usual plan is to prescribe requirements which the school must meet in order to be classed as "standard" and to award some mark of distinction to schools which qualify. These requirements cover such matters as length of term, equipment, sanitary conditions, and the inclusion of special subjects, as agriculture and home economics, in the course of study.

An act of the last Legislature of Maine provides for the rating and standardization of the schools of that State. Whenever the State superintendent is requested so to do, he may send an agent to investigate school conditions and report thereon. This law is de-

signed to improve sanitary conditions, equipment, and teaching processes. The Legislature of Iowa passed "An act providing for the standardization of rural schools and granting State aid and providing for an appropriation therefor." This law defines a standard school and fixes the minimum requirements. State aid will amount to $6 per pupil who has attended the school during the previous year. The State superintendent is required to furnish a suitable doorplate or other mark of distinction to each school approved as standard. In the general appropriation bill passed by the Legislature of Missouri the State department of education was allowed two additional inspectors of rural schools. The movement for standardizing schools should prove beneficial, since it makes a wholesome appeal to every community to improve its school and bring it up to a prescribed minimum of quality.

COMPULSORY ATTENDANCE.

No discussion of educational legislation of recent years would approach completeness if compulsory school attendance laws were omitted. This is especially true, since one large section of the country, the South, has only in comparatively recent time begun to enact such laws. When, however, a beginning was made, attendance requirement took root rapidly in that section, and attendance laws were soon on the statute books of all the States—Mississippi having made the last of the series with the enactment of its law of 1918. The history of compulsory education in the States is generally very much the same story. An initial law, often local option in effect, is enacted, and then comes a period of effort to revise and make the law effective. The Southern States, particularly those of the lower South, are just now in the second stage, or perhaps have just passed through it. The Legislatures of Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee all made their attendance laws stronger in 1919. Generally, the means of enforcement were improved, age limits were extended, and the period of attendance was fixed at the full term or at least at five or six months.

All the Southern States, with the exception of Mississippi, now have reasonably effective attendance requirements, and it is expected that the friends of the schools of that State will try in the legislature of 1920 to make their law more effective. In other parts of the country, where compulsory education is of longer standing, the most marked tendency is connected with the upper age limits. Here the requirement tends to reach up to the sixteenth birthday of the pupil, and in a number of States it is made to reach that limit where the child is not in lawful employment. Minnesota now requires all children between 8 and 16 years of age to attend school during the entire term. A Michigan act of 1919 requires all children between 7 and

16 to attend, but provides that children over 14 who have completed the work of the sixth grade and whose services are essential to the support of their parents may be excused from attendance by the county school commissioner or city superintendent on recommendation of the proper school board. With reference to attendance upon the common schools the acts of Minnesota and Michigan may be regarded as typical.

Another kind of attendance requirement has received new impetus in legislation since the outbreak of the war. This takes somewhat different forms, of course, but the underlying principle is that minors of certain ages who have not acquired a prescribed minimum of education or do not speak and read the English language, as in the case of children of foreign parentage, must attend part-time or evening classes. The law of California will suffice to illustrate the tendency in this class of legislation. It is entitled "An act to require certain high-school districts to provide part-time educational opportunities in civic and vocational subjects for persons under 18 years of age who are not in attendance upon full-time day schools, and part-time educational opportunities in citizenship for persons under 21 years of age who can not adequately speak, read, or write the English language; to enforce attendance upon such part-time classes where established, and providing penalties for violation of the provisions of this act."

PART-TIME SCHOOLS.

One of the prolific subjects of legislation in 1919 was the part-time or evening school. Many of the States made provision for this means of instruction. Some of these laws are mandatory and others are merely permissive. The prevailing type would seem to be a law requiring school authorities to provide part-time or evening classes whenever a specified number of eligible persons apply for instruction or whenever such persons are required by law to attend thereon. An Oklahoma enactment of 1919, for example, requires the board of education of any district in which there are employed 20 or more minors over 16 and under 18 years of age to maintain a part-time school or class for not less than 144 hours in the year. State aid for such schools and classes is provided, and the requirement is made that employment of minors between 16 and 18 years of age shall be under such conditions as to permit attendance. Employed minors between the prescribed ages are required to attend upon part-time instruction.

THE GERMAN LANGUAGE.

The hatred always attendant upon a state of war between two countries has probably not been so acute in America as in some of

the other countries in the World War. There is, however, some evidence of an aversion to enemy characteristics and methods that may hardly pass away with the definite conclusion of peace. It would seem to have been this aversion, mingled with a fear that the use of an alien language would produce disloyalty, which gave impulse to the efforts in a number of State legislatures to prohibit the use of the German language either as a medium of instruction or as a subject of study in the public schools. The requirement that school subjects be taught by means of the English language has been in the law of many States for a long time, but, either to make existing law stronger or to write an initial law where it may have not existed, a number of States made English the only medium of instruction by acts of 1919. Among these States were Arkansas, Colorado, Iowa, Kansas, Maine, Minnesota, Oklahoma, Pennsylvania, and South Dakota. The usual provision applies to private as well as to public schools. The efforts to eliminate German as a subject of study in the public schools resulted in legislative enactments in a few States. Among these were Indiana, Iowa, Nebraska, and Pennsylvania. These laws generally apply only to the elementary grades, though the law of Indiana applies to high schools as well.

On the whole, the schoolman and others interested in educational progress may find much that is gratifying in the educational legislation of 1919. This year may soon be excelled in the matter of educational progress by other years yet to come, but as one looks backward it hardly appears to have been excelled in the past.[1]

[1] For other discussion of legislation, see under Rural Education, Vocational Education, Teacher Training, Library Activities, Physical Education, Kindergartens, and Americanization.

PART II.

EDUCATION IN CERTAIN FOREIGN COUNTRIES.

I. EDUCATIONAL CONDITIONS IN FRANCE.

EDUCATIONAL RECONSTRUCTION.

Since the signing of the armistice, French educational thought has been less radical than during the progress of the war. The concrete task of economic rebuilding, not only in the devastated regions, but also in those where the effects of the war were not written in material chaos, has carried with it the necessity of the rehabilitation of the school system. Influential publicists and engineers hold that the problem of economic rehabilitation is essentially an educational problem. Others, of the humanitarian school, are occupied with the moral rather than the economic training, holding that it is necessary to create in the individual and in the nation the higher morality that will be the most powerful factor in even material progress. Theirs is the plea for the "spiritual foundations of reconstruction."

Leaders of the radical element of educational thought demand an education almost exclusively scientific and technical. Against them a group of publicists, in their turn, defend the classics; and it is interesting to see among them a group of distinguished engineers and captains of industry urging an intensive general training prevailingly cultural. The events of the past five years go far to bear out their position; and this is the element of educational thought that has, more than any other, inspired the Federation of Teachers' Associations, both on the soil of France proper and in her colonies.

Even in the regions where devastation has not been actually wrought, the material deterioration of all things necessary for man's needs has brought alarming perils to the national well-being. No mention need be made of the effect upon children and adolescents of scarcity of food and the lessened nutritive value of that which remains, nor of the serious effects of the condition of lodgings, long unrepaired, overcrowded, and infrequently cleaned, exposing the occupants to every menace of unhygienic conditions. Even more serious has been the intellectual and moral disarrangement arising from the absence of teachers and parents, with the removal of restraint.

An ultimate result, pointed to with alarm in many quarters, is the grave possibility that there are thousands of children of school age who have said good-by to school forever.

Naturally, public sentiment, impatient and forgetful of the appalling magnitude of the task, has come to expect impossibilities of the Government. So acute has this become that local organizations of States General have been revived for the devastated regions, which have outlined administrative and financial plans of relief and presented them for action by the Parliament to compel the executive to take relief measures. Of similar nature are the frequent and often impatient written interpellations of the minister of education by members of the Chamber of Deputies as to what the Government is actually doing for the material restoration of school buildings, the relief of teachers, and the resumption of actual teaching. Representatives of such industrial centers as Lens and Bailleul voiced the cry of all the northeastern Provinces, "Open the schools."

As was likewise to be expected, the unrest of the nation, now first relieved from the all-engrossing demands of war, has turned upon the daily economic privations. These had been endured silently under the conviction that they were the inevitable accompaniment of war, and especially of war upon the national soil. But with no economic relief from the coming of peace the national mass of inchoate thought and feeling, which in England had found more conservative expression in the manifesto of the Labor Party (1918), in France was skillfully seized upon by the Socialist Party. Its leaders boldly proclaimed that the nation was entering upon a new socialistic phase, and in their program demanded the immediate realization of thoroughgoing social and educational reforms.

Such, in brief, is the economic and social background which should be kept steadily in mind for the study of educational conditions and tendencies of France.

TEACHERS' UNIONS.

In the special domain of education, a vivid manifestation of the national unrest is the recrudescence of the question of the right of teachers to organize, to affiliate with the syndicates of workmen, and to go on strike. The agency which has brought this to the fore is the organization of *Les Amicales aux Syndicats*, which dates back to 1915, when, in tentative fashion, a few scattered local branches of teachers affiliated with the labor unions. With the increasing inadequacy of the teachers' salaries, the general association grew with great rapidity. In April, 1919, 90 departmental branches were in existence. By September the number is estimated to have reached more than 300. Since the official recognition by both chambers of the right of Government employees, as well as employees and work-

men of all kinds, to organize, all groups of teachers have been earnestly studying the question of organic affiliation with labor organizations. Among the teachers, by and large, the syndicalists seem to be in the majority; certainly they are vocal in the national press. Naturally, the teachers of the larger centers, following the lead of Paris, have voted affiliation.

Not essentially linked with the movement just outlined, though in places affiliated with it, are the associations of the teachers of the Gironde, founded for the study and defense of the rural school and its teachers. It has been called into being by the steady draining of the best of the rural teachers from the country to the towns and cities, a movement which, in France as in all other countries, has its roots in many complex economic, social, and professional conditions.

REGIONALISM.

This leads to the consideration of what is perhaps the furthest reaching movement, governmental and educational, that has appeared on the national horizon since the armistice. This is the movement called "regionalism." Considered from one side, it may be regarded as a phase of the universal one of reconstruction.

The movement, while it has not been specifically adopted in their scheme of the future by educational thinkers, is regarded by them as substantially furthering the recognition of educational needs as conditioned by the diversified topography, population, industrially and ethnologically considered, climate, productions, and relations to trade currents, domestic and foreign. Its champions hold that the time is ripe to get rid of the lack of adaptation between local needs and governmental decision and action thereon; that in every region of France there are vital problems demanding action to-day—not months or years from now.

PROPOSED LINES OF EDUCATIONAL REFORM.

During the war discussions of what should constitute *l'école de l'après la guerre* were favorite diversions for the sprightly Gallic mind. Naturally, much of the speculation and planning for reform was ephemeral; a large part was the production of teachers who found this an outlet for long-pent-up ideas. Some, of course, born of the enthusiasm of the authors, was without practical value. All, however, had the merit of having steadily in view progression and development and it served the very useful purpose of preparing the soil of national ideas among that people with whom alone, as an English publicist has put it, "Ideas are still the most powerful motive force."

Two main lines stand out:

1. First, the plan of reform projected by M. Paul Lapie, director of primary education under the minister of public instruction. This appeals essentially to the moderate elements in French educational thought and it has carried a quasi-administrative sanction, though no official sponsorship of it has been avowed. M. Lapie starts with an economic basis, declaring it the primary duty of the school to furnish to the nation young people capable of producing twice as much as their elders, while the general training indispensable to all Frenchmen must not be neglected. The school must and will take on a different physiognomy according to the region where it shall operate. In a purely rural setting the school will have its experimental farm, its museums of seeds, fertilizers, and agricultural products; its tasks will be taken from the life of the fields; rural economy, agricultural chemistry, zoology, and botany will have the major place in the lessons. The city school will have annexed a shop, a museum of materials used and objects manufactured in the region, and a stadium for physical exercises and for classes in the open air. The programs of such a school will give the main place to elementary mechanics, physics, and chemistry. All schools, no matter what their economic environment, shall have a common, irreducible minimum of subjects of general training. "No compromise on the unity of the school; increase of its net results by judicious specialization."

Such specialized schools demand specialized teachers. The prospective teacher must, therefore, on the threshold of his training make his choice of being a rural or a city teacher. This specialization will be realized in his training by a reform in the regulations governing the certificates of fitness.

Normal schools should also take on the regional character. In every academic district, certain normal schools should specialize in the preparation of teachers in industrial subjects, others in the preparation of teachers in agricultural subjects. A normal school of the seacoast would train teachers for that environment. Teachers in normal schools should themselves be trained specialists.

Such a forecasting as that by M. Lapie of the educational polity of the future naturally carried great weight with the teaching profession. A number of meetings were reported of local associations of teachers for the avowed purpose of discussing it. Most representative was that of the meeting of the directors of schools of the Seine.

2. Second, the plan of reform projected by the anonymous group styling itself "*Les Compagnons.*"

Several months before the armistice, the weekly review, L'Opinion, published over this signature a series of articles, advocating educational reform of far-reaching social and educational nature. The identity of the authors could at the time only be conjectured; but it

was understood that they were young men serving at the front, most of them former teachers in primary and secondary education, and all vitally interested in the well-being of the profession to which they intended to return. Nowhere could they be ignored.

The original series of theses embodied the popular presentation of their ideas, and directly appealed to the national consciousness of the rank and file of the French people. They demanded, in order to repair the ruin and to replace the fallen, that the educational system contribute with all its forces to the national rebuilding; that none of the intellectual and moral riches of the race be left untouched; that the national educational polity be made completely democratic; that the école unique be provided for all children, progressively compulsory, and lasting to the age of 14 years; that this be closely articulated with vocational instruction, or the lycée, as the pupil's aptitudes may decide; that the present system of limited bourses be superseded by a State system of gratuities for all deserving children; that there be fewer classes, lighter programs, more individual work; that teachers enjoy freedom of initiative; that there be established one great national corporation of all branches of education, State and private, secondary, and higher, at once a great national entity, and yet so decentralized as to permit the full use of all regional forces. "Let liberty and responsibility rule everywhere; they in their turn will develop initiative, the mother of all life."

ADMINISTRATION.

In the field of actual or imminent educational changes, the following bills have been under consideration or actually passed, as indicated:

1. The law concerning technical education, passed in July, 1919.

This law defines the aims of technical, industrial, and commercial education, putting all under the authority of the Superior Council of Technical Education and Inspection and Departmental and District Committees. Public technical schools are divided into national, departmental, and local (business) schools, each with councils composed of industrial and commercial representatives. Private technical schools, urban and local, are under the control of the mayors and the civil authorities. Vocational courses are organized for apprentices, workers, and employees in commerce and industry, compulsory for young men and women under 18 employed in commerce and industry. Such schools shall be organized in (*a*) designated communes, and with courses of study and programs outlined by local vocational commissions, and (*b*) by industrial and commercial employers, located on the premises of their business. Compulsory attendance is required on the basis of a list submitted under penalty of the law by the employers of all apprentices below

the legal age of 18. Fines are levied on employers, parents, and instructors for failure to comply with the provisions of the law.

2. The organic law concerning the public vocational teaching of agriculture.

This law had previously passed the Chamber of Deputies and was voted by the Senate early in August, 1918, by an interesting coincidence, within less than a week of the passage of the Fisher Act in England. Its salient features are as follows:

I. For higher education.
   1. The National Institute of Agronomy. The higher school of agriculture.
   2. Three national schools of agriculture at Grignon, Montpellier, and Rennes.

II. Middle.
   1. Vocational schools of agriculture on the basis of the present practical schools multiplied and reorganized, farm schools reorganized, technical schools of dairying, horticulture, viticulture, etc.
   2. Temporary winter schools independent, or annexed to college or to higher primary schools.
   3. Traveling winter schools.
   4. Post-school courses of agricultural education.

The introduction of agricultural education in primary schools was expressly reserved for further consideration and action.

3. The Caffert bill concerning the status of marriages between teachers.

This was passed by the Chamber in July, 1919, and is under consideration by the Senate. It was the outgrowth of its author's conviction that the present school regulations governing the tenure of teaching posts by married teachers, with their utter disregard of the home life, often led to the frequent sundering of households, or else the forced renunciation of the teaching career by the woman. This attempt to remedy the many resultant evils is hailed by many as a provision of incomparable aid in the sorely needed reconstruction of the French family.

Having in mind the many teacher marriages that have been contracted under war conditions, the bill provides that:

> Within any Department all double posts as teachers falling vacant shall be offered within the current year to every teacher's household where both husband and wife are teachers and serving in that Department. In all cases of such vacancies falling in other Departments precedence shall be given to such teacher couples in other Departments on the basis of professional worth, length of service, and number of children.

In the field of court decisions an important decision by the Court of Cassation is to be noted. Certain associations of parents having

been organized in the arrondissements of the Basse Pyrenees, the minister of public instruction deemed it his duty to demand their dissolution. On many points he maintained their object to be illegal, holding that the right to supervise the education of children is an essentially personal attribute, not to be delegated to an association. A test case having arisen, the court fully upheld the legal right of associations of citizens to control the instruction given in French schools, and allowed the widest latitude to any associations, no matter under what name, to enroll as members any persons, irrespective of whether they be parents or even celibates.

DECREE OF SALARY SCALES.

The field of ministerial decrees touching education is enormous, owing to the nature of the centralization of the system. Postwar conditions have called forth an extraordinarily large number of decrees. Of these the most important for its bearing upon the life and professional attitude of the larger part of the teachers of France was the tentative ministerial decree on salary scales for primary teachers.

This was submitted to the educational committee of the Chamber of Deputies in June, 1919, and has not yet received final action.

The actual figures for this new salary scale, as formulated by the ministry, ranged from 2,600 francs for stagiaires (newly licensed beginning teachers) through the six grades of titulaires (permanent teachers), increasing by 400 francs for each grade, to a final total of 5,000 francs for titulaires of the first grade. Special allowances were made for designated peculiar circumstances.

Directors of schools (men and women alike) start with a salary of 3,800 francs, rising by 400 francs annually to 5,000, with original allowance for residence of 1,000 francs, rising in four years to 2,000.

Compared with the old scale, directors enjoy an increase of 900 francs initial (30 per cent) and 2,100 francs maximum (63 per cent), stagiaires, an increase of 1,500 francs (100 per cent), and titulaires (maximum) an increase of 2,600 francs (115 per cent).

Perhaps the outstanding feature of the new scales is that directors (men and women) receive equal pay, and women titulaires of the four highest classes only 100 francs less than men, though their allowance for residence is somewhat lower.

PHYSICAL TRAINING WITHIN AND WITHOUT THE SCHOOLS.

In no other phase of the national life has the influence of the presence on French soil of the British and American armies been so deep as in the physical. Interest in all things physical among the people at large has been stimulated to a degree that will never allow

the nation to slip back to the national indifference that prevailed before the war. This wave registered itself in popular pressure upon the educational authorities. This was subsequently reenforced by the more technical, but quite forcible, appeal of the physical provisions of the Fisher Act.

The Commission upon Physical Education, appointed by the minister in 1916, at once began to cooperate with the Council of the National League of School Hygiene, with a view to the organization of physical education in educational establishments of all grades. The resolutions of the latter date as touching teachers and adolescents may be taken as a starting point for physical training in the schools as applied to both teachers and pupils.

These recommendations, like so many others, moved slowly through the war-time parliamentary mill; but popular interest, as always, outran official delay. It was fostered by regional meetings of the several allied organizations for physical training.

The informal incorporation of physical training in the educational system was begun in a number of localities long before the close of hostilities. According to the report of the inspector of the academy of Seine-et-Oise, inspectors and school officials of the neighboring lycées and normal schools were convoked by the Ministers of War and Public Instruction at Joinville-le-Pont in April, 1918, for a three-days' series of conferences and practical demonstrations by instructors in the military school at that place. The example of the school of Joinville and the success of its methods had an enormous effect upon public sentiment in favor of physical education. Its methods were carried to many regional centers, and imparted to military instructors and then to civilian teachers, both men and women. Joinville was itself frequented by normal instructors, rectors of academies, and inspectors.

With the first opportunity, as thorough an examination as possible of hygienic and health conditions among the children of the devastated and occupied regions was made by the French Academy of Medicine. The first preliminary report dealt with three groups of school children as examined. Those below 6, those from 6 to 12 years, those from 13 to 15 years. An appalling condition of below weight was noted among the children of nursery schools. Of those attending elementary primary schools it was estimated that 80 per cent were below weight. The throats of many were noted as too small, the heart's action below normal, the arterial tension weak. Of the younger pupils, 20 per cent, and of those from 8 to 13 years, 60 to 75 per cent, were reported as suffering from adenoids and tracheobronchial affections. From the pedagogical point of view all the children of the vicinity of Lille show a school retardation of at least two years.

Conditions are necessarily worse in these regions than in France at large, but the hygienic and physiological deterioration of French children is reported to be general enough to alarm the thinkers of the nation and to arouse them to the urgent necessity of remedy by the most direct means. French educational thought has been profoundly stirred by the activities of the leaders of the medical profession, who have by lecture and published book sought to impress upon the nation the duty of making physical education the basis of all other. Indeed, they have sought to identify it with the very existence of the French race.

PRIMARY EDUCATION.

The war-time demoralization of the schools could only bring with it a material decrease in primary-school attendance. This was so marked as to call for a discussion at the 1918 meeting of the National Association of Mayors and the passage of a resolution demanding that it be checked by all possible methods. Since the armistice a number of communes report encouraging increases in school attendance. The study of juvenile delinquency as a national problem and menace has been systematically taken up in many localities, both by teachers and by physicians, and it has been logically linked up with school conditions. Researches have been made into the most usual social, family, and legal causes for the retrogression of the child from the poor scholar to the juvenile delinquent, and medical opinion has suggested radical remedies.

An experiment of great value to French education was the institution of mixed schools in small communes during the war. This of course touched a phase invested with ingrained traditional prejudice. According to the report of the inspector of the Academy of the Gironde, in several communes the regular teacher, called to military service, was replaced by a woman. Excellent results were obtained in behavior and scholarship. Not the least of the causes of improvement is the diminution of the teacher's work.

It is to be noted, however, that the educational officials in France are not yet converted to the wisdom or the practicality of coeducation in primary education. By decree of July 1, "as soon as conditions shall permit a return to the normal, women teachers shall be employed in mixed schools only under the regulations prevailing in pre-war times, and this applies to private establishments as well as those of the State."

The essential task of the primary schools to discover ability wherever it exists as a source of supply for all the higher stages of education has not diminished in the public estimation with the coming of peace. Suggestions still continue in the press as to the best

methods to be adopted. The general contention of the popular journals such as L'École et La Vie have had great vogue.

First of all, the nation must look to the great democratic masses, assured of educational opportunity; to the demobilized soldiers, consisting of the youth of the classes from 1910 to 1919 who had been interrupted in their studies; to the wounded and convalescent; even to foreigners who have come to love and to serve France; to those whom the war has awakened to a new knowledge of themselves and the future; to the great number of children orphaned by the war; and to the women whose powers and potentialities the war has revealed as never before.

The periodically recurring agitation for increase of manual training in primary schools has been furthered by the demand for a type of regional training better adapted to the pupils' environment. Scattering ministerial decrees throughout the war encouraged the extension of such courses in primary schools, especially those that involved the use of native materials which might be worked into the finished products. The contention of the advanced advocates of thoroughgoing manual training in the primary schools met unexpected opposition from teachers in technical training, who maintained that such technical instruction was ill adapted to young children because of the harmful strain on their attention, and more essentially from the nature of the two materials, wood and iron, in which manual training had to be given.

A strong move to have manual arts given larger place in the lower normal schools must be chronicled for the past three years, based upon the fact that most of the teachers of the higher primary schools come directly from such schools. Especially do the advocates of emphasizing manual arts dwell upon the fact that the higher primary school must soon become largely technical.

The use of motion pictures for education purposes (Cinémas Scolaires) was some years ago advocated by the French educational authorities; and just before the war a commission was appointed by the minister of public instruction to investigate their adaptability to educational purposes. Various localities have independently recognized the practicability of such instruction, notably Lyon. Apparatus was installed in the early spring of 1919 in one of the best school buildings of the city; and there are given regularly four sessions of pictures a day. All are during school hours, and 1,200 pupils daily can receive instruction in this way. Pupils from the other schools of the city, and on occasion, from the suburbs and adjacent towns are brought in by rotation fixed in advance. The program (in American, the "film") remains unchanged for a fortnight. Notices in advance as to what pictures will be shown are sent to all these schools, in order that the teachers

may explain to the pupils the essential point and features of each film. A report is required of the pupils on the pictures they have seen, orally of the smaller children, in writing of the larger ones.

The application of the cinéma to educational purposes had already been made in France, initiated by the organization, Le Cinéma à la Campagne, which began early in the war to operate from village to village, transported by motor vehicles, and instructing the peasants, adults, and children in all that concerned the war and its progress and significance to France. It is to be continued as an essential element in reconstruction.

Covering the primary education of children and of illiterate adults, the ministries of war and public instruction, early in the war, established a system of village instruction ("Conférences au Village"). Neighboring and accessible villages were grouped in units; the primary teachers of the district, generally women, took voluntarily the leadership in instruction, and the schools were the meeting places. The powerful socializing and unifying part played by this instruction can hardly be overrated.

An outgrowth of this movement, and one that is steadily spreading with reconstruction, is the organization of Réunions Civiques et Familiales, which furthers family, local, and village meetings, and sends out programs for exercises to be rendered by children and adults alike. These combine distinctive national, patriotic, and educational aims. Old folk songs, local songs, patriotic airs, and always the Marseillaise, with the history of each; selections, lyric and dramatic, from the best French authors have been selected to illustrate such general themes as: The War and The French Ideal; Old France and New France; The Terrible Year (1871); Alsace-Lorraine; The Grief and the Honor of the School, a program consecrated to the heroic dead. Some local person of note, the teacher or the representative of the civil authorities, has charge of the exercises.

PRIMARY TEACHERS.

In no other of the belligerent countries, with the possible exceptions of Germany and Austria, have the condition and spirit of primary teachers been so powerfully affected as in France. Economically, the teacher's lot became, in many localities, unendurable. There was practically no increase of salaries during the war, and the ever increasing price of the necessaries of life reenforced by the attraction of higher wages at the start in munition and industrial establishments (marked as well in England and in America), conspired to draw an extraordinary number of teachers of all ranks into other and more immediately rewarding lines of activity. Professionally, however, as an offset, it must be chronicled as one of the

chief social effects of the war, that the heroism of teachers of all grades on the battle field and the services of all teachers back of the lines—active in leadership and in the formation of the national "Union Sacrée"—brought to the teachers as a class a standing and a respect they had never before enjoyed. Teachers and educational thinkers alike joined in a high and just pride that the reorganized public educational system had, within less than 50 years, produced a corps of men and women who so naturally took the lead in the nation's acute stress.

Back of all plans for filling the depleted ranks of the teachers loomed up the question of salaries. The minister of public instruction, in his project for the raising of salaries in primary education issued January, 1919, assumed that the principle of obligatory continuation for adolescents (as formulated in the Viviani bill) will come sooner or later, and with it the need of better-trained teachers: The differentiation of salary by sex must and should be abolished; furthermore, both men and women would be permitted to begin teaching at 16, not as hitherto at 18 and 17, respectively.

M. Véber, in his report of the budget for that branch of education, made in January, 1919, maintained that the most vital consideration was that of recruiting the teaching force. In various ways 6,000 teachers were in 1918 restored to their schools and final demobilization was continuing this. Substitutes, though called to other services, had been retained in encouraging numbers; but a great loss of teachers was still recorded to be made up. With the necessary development and restoration of schools, the State would have to make her supreme effort to procure the teachers needed. Recruits to the teaching force must be attracted by immediate maintenance grants and by better pay in the future. Scholarships must be offered in complementary courses, and in higher primary schools to children who show a pedagogical bent. The expenses of pupil teachers in normal schools must be entirely defrayed; the teachers in actual service must be better paid.

The entire question of salary scale, as in all countries, strikes its root deep into innumerable economic, social, and professional conditions and prejudices; and, again as in all other countries, the adjustment of this most troublesome of all questions connected with education to the satisfaction of all parties concerned is yet to be found.

PRIMARY AGRICULTURAL EDUCATION.

When it is considered that France is essentially a country of small landholdings, it appears certain that increasing attention will be given to systematic training in agriculture in the primary schools. As yet, however, expert thought, while admitting the long step the organic law of agricultural training, passed in August, 1918, consti-

tutes toward an organized instruction in agriculture, and especially in continuation and secondary schools, points out the deficiency of its practical provisions for primary instruction.

Even if according to the organization required by this law 1 vocational school of agriculture, 10 temporary winter schools, and 10 traveling schools should be assigned to each of the 17 Departments, the proponent of the law himself estimated that only 60,000 favored youths could enjoy the advantages of the reform, whereas 1,000,000 boys destined to an agricultural life should be taught in the system. For the more than 900,000 boys remaining there was provided a post-school agricultural training of four years (from 13 to 17), of 150 hours yearly, to be established where called for by the municipality or the departmental commission.

The actual introduction of an agricultural section in higher primary schools, though urged by ministerial decrees, has been effected only in comparatively few localities. According to well-informed authorities, local prejudices of many kinds stand in the way. Availing themselves of the local freedom allowed since the war, certain schools have admitted to the winter course pupils from 14 to 16 years, not only those who had obtained the certificate of primary studies and ceased to attend school since the outbreak of the war, but those who were equally mature and worthy but had been prevented by circumstances from obtaining such certificate. Advantage was taken of the Sunday courses of instruction provided in the ministerial decree which dealt with regional needs, and pupils were assembled one afternoon weekly throughout the summer for the purpose of reviewing the theoretical lessons of the winter in the growing crops.

HIGHER PRIMARY AND CONTINUATION COURSES.

The movement toward this branch of instruction first began to take shape with the ministerial circular of May 27, 1918, which proposed the topic of continuation courses (Cours de perfectionnement) for discussion by the pedagogical conferences of the autumn.

The teachers were called upon to give their opinion on the choice of schools to which such courses could be annexed, on the employments to be established, or teachers required as a result, the program and time schedule suitable, the working material necessary, and the certificates to be granted upon the completion of such studies.

The opinion of such conferences was unanimous as to the value and need of such courses as a transition to apprenticeship instruction, if put into the hands of mature and trained teachers, and as a guide to better application of vocational knowledge, and if completed by visits to factories, shops, and experimental farms and agricultural tests. But the teachers were none the less unanimous in

declaring that the projected courses would have no chance of success "if the law should not oblige the apprentices to follow them and the patrons to assure their attendance at the hours fixed."

Such action, popular and professional, was intended to arouse public sentiment on the subject of adolescent education and to accelerate the passage of the Viviani bill, described in a previous report. This bill, hailed at the time of its introduction, March, 1917, as the most important educational event of the past decade, had, like so many other bills, not received final action in the confusion of war demands. Word now comes that it is soon to be taken up and passed. The chief addition to the bill as now before the Senate is that of compulsory physical training and a record of the health of the adolescent at various stages, to be incorporated in the livret scolaire.

PREAPPRENTICESHIP.

In the field of pre-apprenticeship instruction, which is as yet practically unorganized, a number of interesting experiments in training complementary to the elementary primary branch are recorded by the special commission. These schools conform to various types, though most offer three-year courses and all are flexible and adapted to local environment. The one that attracted most attention was that at Marseille, maintained by the cooperation of the municipality, the executive council of the Chamber of Commerce, and the committees on the employment of apprentices and on technical education. The courses were intended for pupils of 12 to 14 years and had the aim of affording additional instruction in general subjects and of imparting a reasonable education of the hand and eye in drawing, modeling, and related manual arts.

Effects of the labors of the vocational commission may be seen in the technical orientation of the higher primary schools in various localities. For example, at Villefranche the school has been articulated with industrial and commercial careers, and the Conséil General has voted it 8,000 francs for the maintenance of scientific courses for which teachers of the local college will be provided as well as experts from the various factories in the vicinity.

SECONDARY EDUCATION FOR BOYS.

The ending of the war brought no decrease of national interest in the problems of secondary education for boys. The undemocratic character of the larger bulk of secondary education, from the viewpoints of administration, contents of studies, lack of articulation with primary work, and methods of teaching, has had all possible changes rung on it.

The greater utility of the subjects offered by the higher primary schools, and their better preparation for the practical pursuits of life, attract those leaving the primary schools in the proportion of nearly 4 to 1. According to the figures for 1917, the latest available, the public higher primary schools enrolled more than 300,000 boys; the colleges and lycées about 90,000.

Criticism, therefore, has set largely toward a reorganization along scientific and useful lines; but even the partisans of innovation hesitate to turn the schools of France into commercial and technical institutions and to put the traditional and cultural elements of education completely on the side. It is safe to say that the great majority of critics recognize in various degree the defects of the present secondary school, and aim at introducing a new spirit responsive to modern needs, while retaining and emphasizing general education. The deep-rooted idealism at the bottom of French secondary education has the traditional support of all the governing and intellectual elements of French national thought. Here is intrenched the training of the youth in the Latin spirit, of which France is proud to think herself the modern representative par excellence. To overthrow the one institution which represents this national pride or, indeed, to modify it materially, will prove a formidable task.

Criticisms resolve themselves into projects to give the traditional courses of the lycée: (a) A distinctively scientific tone, meaning by that extensive training in physics and chemistry, especially in their application to industry and agriculture; or (b) a commercial and business tone, with emphasis upon the practical sides of the modern languages; or (c) a content elective from each of the above, with vocational bias and systematic study of the individual boy's natural aptitudes.

It is around the study of Latin that the contest rages hottest, as is the case in England and America. The arguments for and against have many times been threshed out, and perhaps can not be reenforced by anything new.

SECONDARY EDUCATION FOR GIRLS.

In the light of the widespread extension of woman's activities, of the extreme importance assumed by them during the war, of the progress of feminism as a distinct national and international force, and the progress of the idea of woman's suffrage in France as in all other enlightened countries, French educational thought of all shades has asked itself if the world has here to deal with an ephemeral movement, born of the war and its restlessness; or, on the contrary, with a lasting social and economic evolution, which carries within

itself a force and energy sufficient to be embodied into law and custom and so to transform society.

Whatever be the answer—and there is yet no real unanimity in France—the interest in secondary education for girls has continued unabated since its awakening by the exigencies of the war. Public sentiment has compelled a recognition of the problem and its handling by the educational authorities.

The extraparliamentary commission, appointed by the minister of public instruction in January, for the formulation of a special baccalaureate for women (le cinquième baccalauréat) submitted its report in May, 1919, through Inspector General Blutel. Basing its findings upon a questionnaire sent out to teachers in that field, the commission advocated the establishment of the fifth baccalaureate along the following lines:

1. The course will cover six years instead of five, with a preliminary year below. Two cycles make up the entire course: The first cycle comprises the first year (the old preparatory), the second, third, and fourth years. The examination upon the fourth (instead of that upon the old third) will mark the transition to the second cycle.

The second cycle comprises the fifth and sixth years with finishing examination, and carrying diploma of completion of studies, or, at choice, the simple diploma reserved for the pupils of the lycée and carrying the old sanctions, with the right of the holders to present themselves for the examinations for the higher normals at Sèvres and Fontenay. As regards content, along with the body of compulsory teaching will go to the option of Latin or of the sciences.

Summarizing the chief features of the new plan: Critics hold that it does not so much constitute a privilege to which girls educated by the State are admitted, to the prejudice of those privately educated, as it does a privilege enjoyed by the girls over that enjoyed by the boys. Girls will continue as heretofore to be admitted to the male baccalaureate, but boys will not be admitted to those for girls. Phophecies are made of resulting ultimate injustice to boys and young men who, returning from the war, wounded it may be, and exhausted in mind and body, will find substitutes and girls with the new baccalaureate installed in their places.

Among the women thinkers on educational subjects also the recommendations of the commission brought a measure of dissatisfaction. They would have preferred flat assimilation of subjects, courses, and requirements to those of the boys' lycées, with the same preparation for the same baccaulaureate certificates of teaching and official standing. The National Women's Council, the principal organ of feminine thought, formulated a counter project for the baccalaureate to be submitted to the Chamber of Deputies.

This plan proposes a course of six years for the women's baccalaureate preceded by a preliminary course, locally optional, with the years named from first to sixth, conversely to the traditional terminology of the boys' lycées. With the exception of Latin, the study of which is still to be formulated, the subjects of distinctively feminine education may be admitted, under restrictions, under cycle one.

TRAINING IN DOMESTIC SCIENCE.

The need has long been recognized of reorganizing and developing training in domestic science and related agriculture by courses for girls, parallel to that in agriculture for boys. Such a counterpart to the system outlined above in agriculture is provided in the second section of the law just mentioned. According to this instruction in domestic science will be provided in:

I. Higher education—
   1. Higher schools of agronomic-domestic science established at Grignon, Montpellier, and Rennes.

II. Middle—
   1. Permanent vocational schools in domestic science, corresponding to practical technical schools for boys and offering two-year courses.
   2. Temporary domestic-science courses for girls unable to attend the above class, annexed to agricultural schools for boys or to other schools under the control of the Minister of Public Instruction.
   3. Traveling schools of domestic science, of the nature of those already tried in some departments but multiplied in number.

As has been the case with agricultural instruction for boys, approximately only 60,000 out of an estimated million girls will thus be provided with domestic-science instruction; but, also as in the case of boys, the law establishes a post-school instruction in agronomic-domestic science for girls over 12 years of age, taught by teachers of similar equipment to that outlined for those of agricultural schools of corresponding grade. In such schools would be taught housekeeping, cooking, cleaning, the care of linen and clothing, canning and preserving, the care of children, simple treatments in illness, practical training in sewing and dressmaking, and laundering.

With increased efficiency of rural teachers in these practical lines and sufficient time allowed for intensive normal training of recruits to the teaching force there will be added courses in animal husbandry, feeding and keeping of domestic animals, poultry raising, the selection and care of milch cows, the raising of pork, beekeeping, elements of scientific dairying, horticulture, and even of agriculture proper.

GROWTH OF SENTIMENT FOR COEDUCATION.

Four groups of establishments, official or semiofficial, which up to the war had opened their doors only to male students, have decided to receive women on the same terms, with a view to preparing them for industrial and commercial careers. These establishments are:

1. The Central School of Arts and Manufactures.
2. The Higher Schools of Commerce at Bordeaux, Dijon, Marseille, Montpellier, Nancy, Nantes, and Toulouse.
3. The National School of Clockmaking at Cluses.
4. The Practical Schools of Commerce and Industry at Evreux, Mans, and Saint-Nazaire.

UNIVERSITIES AND PROFESSIONAL EDUCATION.

Far-reaching changes in thought have been steadily at work in the domain of higher education, which seem to have been accelerated since the armistice. Under the head of administration have been noted: The appointment of the extra Parliamentary Commission, of which M. Léon Bourgeois is president, charged with the study of higher education in its national aspects, and the establishment of professional institutes and special diplomas at many universities. The move to add representations of industrial and agricultural interests to the regional boards of universities is also to be recorded. The international sentiment of the French universities is extraordinary. The establishment of the (so-called) "Serbian University in the Alps," at Mont-Dauphin, picturesquely located at an altitude of 1,000 meters and at the junction of the Durance and the Guil, and the assignment of 3,000 American students to the Sorbonne, Montpellier, and other universities may be said to have left permanent effects on French education.

The establishment of fellowships at French universities, available in 1919–1920, for American students, is highly significant as the first step in the policy of counteracting the prewar influence of German universities and German educational ideals, and of turning American post-graduate students to French universities.

By local and regional academic celebrations, international ties with Czecho-Slovak, Spanish, and Swiss educational forces, have been successively emphasized within the past eight months.

Altogether, the French universities, by force of will and of occupying the strategic position in European thought, have taken the lead in promoting closer intercourse between universities by exchange of teachers, by mutual facilities for student and professor, by intellectual and professional contact for the promotion of mutual understanding between friendly and allied nations, without sacrifice of the essential and traditional genius of each.

REORGANIZATION OF MEDICAL SCHOOLS.

Under the head of professional studies, while the other fields exhibit the stirring of new ideas in readjustment to world thought, the reorganization of medical studies shows greatest activity as the result of war methods and demands.

The Council of the Faculty of Medicine of Paris has just presented to the minister an important report in which it examines the problem of the modifications to be effected after the war in medical education. Its avowed purpose is to keep abreast of the foreign faculties of medicine.

Even in time of war, important reforms were realized. Among these, is to be noted that, since November, 1917, several courses of clinical instruction have been set for the afternoon, whereas all before had been given in the forenoon. This arrangement permits pupils and physicians alike who may be desirous of perfecting their training to find at every hour of the day, in the hospitals, courses they wish well coordinated.

This clinical instruction in the afternoon will be further developed and the faculty plans to combine it with free instruction, entrusted to the physicians of the hospitals. So, under one single direction, and in one common effort, will be grouped, as a teaching force, all those physicians and surgeons, who by their researches and their worth as teachers, have won mastery of their profession.

The faculty, which, by the organization of special courses, has sought to further the continuation of studies for demobilized students, is keenly interested in extending its relations with neutrals and allied nations. It has carefully studied the interchange of pupils and teachers, and has organized, for the next term, lectures by eminent savants of America, England, and Spain.

II. EDUCATION IN ENGLAND.

The cessation of military activities found the public opinion in England ready to assume the responsibilities created by the war. "The hard discipline of war," states the report of the board of education for 1917–18, "has taught the nation to recognize how great is the debt which it owes to its schools and to those who teach in them." The slow but steady progress in educational reconstruction manifested itself in various ways.

Provisions had to be made for the great army of young demobilized munition workers who, it was felt, needed some intelligent assistance and guidance during the period of resettlement. Schemes for the education of thousands of young men still enrolled in the British

armies had to be extended and facilities created for the training of the ever-increasing army of men discharged from the service.

Spurred by the board of education, local education authorities made special efforts to determine the needs in their areas and to formulate proposals in anticipation of the statutory requirements contained in the new education act of 1918. The scheme involved the abolition of child labor, the provision of nursery schools, the raising of the age of school attendance, the establishment of compulsory continuation schools, and the reorganization of the higher grades of the elementary system with a view to coordinating elementary and higher education.

Lost ground had to be recovered quickly if the schools were to benefit from measures under consideration. The regulation against admission of children under 5, restricted during the war in certain schools on account of the difficulty of providing the necessary staff, was relaxed. The rule applies particularly to schools in poor and congested districts. New admissions are henceforth to be made only at the commencement of a new term. Instruction in practical subjects, particularly in domestic science, has become a reality in the elementary schools. The education act is directly responsible for the new start, in that it lays upon the education authorities the duty to introduce practical instruction in the curriculum of public elementary schools.

Notwithstanding the shortage of physicians and nurses, the school medical service was maintained at a high level. The total number of children inspected during the year was 1,362,063, which represents about seven-tenths of the number of children that would come for inspection in a normal year. In view of the additional duties imposed by the new act, local education authorities are extending the scheme of medical inspection and treatment by providing more school clinics and enlarging the medical staff. Physical training also has been promoted by the establishment of grants for the salaries of organizers of physical training in public elementary schools. Closely related with this movement is the practice of the schools of conducting journeys and of teaching in the open air not only physically defective but also normal children.

Child welfare is further to be benefited by revised regulations for the training of health visitors, whose duty is to assist mothers in the care of children under 5 years of age. The regulations issued in July, 1919, by the board of education, in consultation with the newly created ministry of health, offers a more thorough training to the candidates and provides that the new training centers should be associated with a university.

The revised syllabus for the training of teachers in the general principles of hygiene, "with a view to their practical application in the educational and personal interests of the children," is another

proof of the widespread interest in the physical welfare of the young generation.

The problem of young boys and girls withdrawn prematurely from the discipline of school for work in the munition factories, and now suddenly released, was pressing for solution. The board of education offered financial aid to local education authorities for the provision of special centers where young people could receive informal instruction until they should obtain employment. To promote the establishment of these centers the board offered to bear all expenses for the first six months, while the local authorities were to make necessary arrangements for premises, equipment, and teachers. In the event of any authority desiring to continue an unemployment center beyond the period of six months the board assumed half the responsibility for the cost. The ministry of labor supplemented the offer by providing "out-of-work donations" to persons between the ages of 15 and 18, on condition that they attend the centers. For the purpose of placing young boys and girls in proper positions the education unemployment centers are to cooperate with the juvenile employment exchanges now under the ministry of labor.

A further step in repairing the educational losses was taken by the trustees of the National Relief Fund. A sum of money placed at the disposal of local education authorities enabled them to offer vocational courses, generally of a year's duration, to promising boys and girls selected from those who have been in attendance at the juvenile centers. A maintenance allowance of 20 shillings per week was offered to candidates.

The estimates for the board of education for England and Wales show a striking increase, the figures for the current year being £31,353,111, as compared with £19,206,705 in 1918–19. The grants for elementary education show an increase of £9,345,802 over those for last year. The provision for teachers' pensions is next in magnitude, the increase amounting to £1,005,335.

SECONDARY EDUCATION.

The year 1918–19 has been marked by considerable progress in secondary education. The report of the board of education shows that the total number of schools on the grant list in England and Wales was 1,065, as compared with 1,061 for the previous year, and the increase in the number of pupils was 28,877. The number of new admissions in 1918 was five times as large as in 1913.

A still further development in secondary education is to be expected from recent changes relating to denominational secondary schools. According to the old regulations the trust deed in schools eligible for grants could not require the majority of the governing body to belong, or not to belong, to any particular religious denom-

ination. This provision is deleted from the new regulations. The old article further declared that the trust deed must not provide for the appointment of the majority of the governing body by an appointing authority required to belong, or not to belong, to any particular religious denomination. This provision has also disappeared. Further, there need be no majority of representative governors, if at least one-third of the total number of governors are appointed by the local education authority. This arrangement places the denominational secondary schools on almost equal terms with any other secondary school.

The regulations concerning advanced courses for pupils intending to enter universities differ little from those of 1918, when an important change was made in the modern studies, English taking the place of Latin as a main subject. The number of courses approved during the year was 239, of which 138 were in science and mathematics, 26 in classics, and 75 in modern studies. The emphasis laid on the study of English will, no doubt, be in substantial agreement with the recommendations of the departmental committee, recently appointed to inquire into the position of English not only in a liberal education, but in relation to the needs of business, the professions, and the public service.

The day or part-time continuation schools intended under the act for boys and girls between the ages of 14 and 16, and ultimately 14 and 18, remain yet on a voluntary basis. Although the education act was passed in August, 1918, little constructive work has been done in this respect by the local education authorities. The slow progress is undoubtedly due not so much to reluctance on the part of the authorities as to the enormous difficulty in obtaining the necessary staff and building accommodations.

The board of education seems, however, to be anxious to have the scheme developed as early as possible. In a circular issued last July the local education authorities were instructed to prepare and submit schemes for educational developments in their areas. It was urged that "all forms of education shall be considered as parts of a single whole" and "that all local education authorities, so far as their powers extend, shall contribute to the establishment of an adequate national system." Preliminary investigations have been started in numerous places, and a realization of the provisions may be expected in the near future.

Pioneer work in part-time education is at present undertaken by some of the enlightened employers in the so-called works schools. During the year there was a marked increase in attendance during ordinary working hours. The classes were under control of the local education authorities, or the employers themselves, who in many instances provided competent instructors for the systematic training

of the employees in their own works. The establishment of works schools by private enterprise, though encouraged by the board, is viewed by labor with a certain amount of suspicion. Objections are raised that these schools may become biased in form and narrow in scope, and may fail to provide that broad education which is the primary object of day continuation schools.

A memorandum recently prepared by the Labor Party's advisory committee on education states that "the primary object of the new continuation schools should not be to impart specialized industrial or commercial training, but to give boys and girls a good general education, to develop their physique and character, and to prepare them for intelligent citizenship." The program of the Labor Party with regard to continuation education is similar to that issued previously by the departmental committee on juvenile education. The committee recomends, however, that the subjects taught in these classes should have something of a vocational bias, as suggested by the occupation of the young workers.

TEACHERS.

The main difficulty which confronts the authorities in England is the inadequate supply of teachers. For some years past the influx of entrants into the teaching profession has been steadily decreasing, with the result that at present the normal wastage caused by death or resignation can hardly be replaced. In a circular issued in August, 1919, the board of education states that the number of candidates who are admitted to the profession yearly ought to be more than double what it is now. The problem became more serious with the passing of the education act of 1918. Under its provisions a larger reinforcement is required in the public elementary schools. No less than 32,000 teachers will be needed for the new continuation schools. A large number must also be obtained for the new secondary schools, while the nursery schools will also make demands on the supply of teachers. Many education authorities have taken steps to increase teachers' salaries in accordance with the principles suggested in the report of the departmental committee issued in February, 1918, but much more will be needed to attract new candidates.

The London County Council adopted a new scale for elementary school-teachers in May, 1918. While the new figures exhibit considerable improvement over past practice in the payment of salaries, the new scale did not meet the general demand. This necessitated another revision of the scales, according to which assistant teachers in public elementary schools entering the London service will begin at not less than £180 per annum for men and £165 for women. Besides, the progress through the scale of increments to the maximum salary will be considerably quickened. The revised scale will add to the expendi-

ture for the current financial year an amount estimated at £629,000. The discontent of teachers, which sometimes resulted in teachers' strikes, led to the belief that the only equitable solution was the adoption of a general scale of salaries on a national rather than local basis. A conference, convened in July, 1919, by the president of the board of education, adopted the following resolutions:

1. That it is desirable to provide a central organization, representative of local education authorities and teachers, to secure the orderly and progressive solution of the salary problem in public elementary schools by agreement, on a national basis, and its correlation with a solution of the salary problem in secondary schools.

2. That for this purpose a standing joint committee of representatives of local education committees on the one side and the national union of teachers on the other, in equal numbers, should be constituted.

3. That for any resolutions of the committee the consent of both sides of the committee should be required.

For the consideration of local interests standing local advisory committees, representative of the teachers and education authorities, have been created in many areas. The object of these committees, defined by the executive committees of the Association of Education Committees and the National Union of Teachers, is not only to look after financial adjustment but also to consider broader issues relating to education.

AGRICULTURAL EDUCATION.

The urgent need of a more comprehensive system of agricultural education and research accentuated during the past few years led to far-reaching proposals which entail an expenditure by the State of about £2,000,000 during the next five years. The board of agriculture proposes to encourage higher agricultural education by liberal grants to colleges and universities. It is also hoped in the future to bring the farmer into closer touch with the colleges by the establishment of demonstration farms and other organizations calculated to achieve the same purpose. The local education authorities are to receive from the State £2 for every £1 they expend on agricultural education. This will undoubtedly cause the setting up of a number of farm schools or farm institutes, with short courses for adult students. It is expected that these institutes will also provide facilities for school-teachers who wish to qualify in the rural subjects required in the day continuation schools. The proposals of the board of agriculture are especially opportune in view of the recent recommendations embodied in a very interesting memorandum on the reconstruction of agricultural education in England and Wales issued recently by the agricultural education association.

UNIVERSITIES.

The war has also brought into clearer relief the need of State assistance for the more efficient development of universities in Great Britain and Ireland. A standing committee has been appointed by the Treasury "to inquire into the financial needs of university education in the United Kingdom and to advise the Government as to the application of any grants that may be made by Parliament toward meeting them."

It is felt, for instance, that the universities will have to provide greater facilities for those with meager means who fail to secure a scholarship. Changes are also expected in the position of women students. Finally, there is the problem of readjustment between the various schools of science for more efficient cooperation and specialization of work.

The assumption that State control is bound to have a detrimental effect upon the life of the university loses much weight in view of Mr. Fisher's repeated assertions that the board disclaims any idea of interference with the affairs of the universities, which must remain free and autonomous.

With the resumption of the university studies interrupted during the past few years came the demand for more practical subjects. Although the campaign for removing the barrier of compulsory Greek at Oxford resulted in a close vote for its retention, the opponents did not give up hope for an early compromise. The science courses are overcrowded and the modern-language schools are receiving far more attention than in the past. The lack of scientific training in business is to be remedied by the establishment of a school of commerce at the London University. The courses are to lead to a bachelor's and a master's degree. The salient feature of the new courses is that a modern language is to be taken throughout. The languages offered are Polish, Czech, Roumanian, modern Greek, and some of the eastern languages.

III. THE TREND IN THE SCHOOLS OF SCANDINAVIA AFTER THE WAR.

LESSONS OF THE WAR.

The war has simplified the interrelations among the Scandinavian countries. It has removed the menace which Sweden saw in the East and Denmark in the South, and thereby also effected a removal of certain cross-currents in the relations between these two countries themselves. The new outlook is regarded as favorable for the

industrial and educational progress of each country according to its individual character.

Educators in Scandinavia are studying the school systems of other countries, partly with the view of concerted movements toward peace and partly to see how the schools of each country have met the recent crisis and stood the test. The Norsk Skoletidende, February 5, 1919, says that the Germans have set up "information and instruction as their alpha and omega; the building of character has been left either to chance or taken up in the school disciplines on its passive side only—patience, perserverance, thoroughness; not initiative and courage. They have demanded the severity of 'drill' in accordance with the words of Moltke, 'military discipline is needed by every community.'" "In contradistinction to these principles," continues the Skoletidende, "the British and the Americans have maintained that the forming of character is the chief task of the schools and, to speak with Locke, 'information the least.'"

In Denmark, L. Mortensen writing in Vor Ungdon, has reached identical conclusions with reference to the collapse of modern culture during the past few years. Impressed with its lessons, he goes so far as to draft the outlines for the work of an entirely new type of school—one that should have the building of character as its chief aim. None of the schools now in existence, he contends, can do this in a way fully to profit by the lessons of recent events. "Their work is too diffused and their tasks too many and too diverse to admit of the time necessary for the development of character among the pupils." The school he advocates should not supplant but supplement existing types; its main lines should be (1) physical training, (2) continued instruction in general subjects with special stress on vocational training, and (3) means and occasions for idealistic and spirtual influence.

INTERRELATIONS AMONG SCANDINAVIAN COUNTRIES.

The common interests of these countries are being furthered by the resumption of prewar activities and by the forming of new all-Scandinavian organizations. The Association of the North, formed in 1918 to promote cultural and industrial relations among the peoples of the northern countries, is working for a more closely united Scandinavia. In May, 1919, representatives from Norway, Sweden, Denmark, Iceland, and Finland met in Copenhagen and organized an Authors' Association with the purpose of working in their respective fields in closer cooperation. The all-Scandinavian Teachers' Association, besides its work as a body of educators, wields a powerful influence in maintaining northern type characteristics in education in these countries.

EDUCATIONAL RELATIONS WITH WESTERN EUROPE AND AMERICA.

The war has affected all movements in these countries, and, in a way, merged them so that they are not clear-cut political, industrial, or educational, but present a reaction of one upon the other. The dislocation of Scandinavia's foreign educational connections is due in part to a new political trend, but mainly to a growing belief that the schools of their neighbors on the south were not efficient in the best sense of the word. This skepticism has had a twofold effect: It has paved the way, first, for a strong nationalistic trend; and, second, for endeavors to establish educational connections with France, England, and America.

Dr. Fridtjof Nansen, the famous explorer and scientist, now president of the National University of Norway, expresses the desire that scholars of his country may become more fully familiar with the work in science done at American universities. A Government commission from Norway visited the United States during 1918 with the view of studying commercial education here in connection with the founding of a commercial university at Bergen. They were favorably impressed with the greater reciprocity between professors and students here than in Norway, also with the close relations of business schools with the strong, brisk business life of the country.

The exchange of students between the United Statese and Scandinavia is growing in its scope and proportions mainly under the patronage of private foundations. Consul General Sturm has increased his original donation by a quarter of a million crowns to promote such exchange of students with the western countries. In September, 1919, an organization for this purpose was formed in Sweden; its president is Svante Arrhenius; among its supporters are Prof. Ivar Benedixon, Gustav Dalen, and the political leader, Hjalmar Branting. It has already sent a number of students to this country on stipends of $1,000 each. The American-Scandinavian Foundation, with headquarters in New York, has long supplied funds for a similar exchange of students, and has increased the scope of its work by sending twice the number of any former year.

SOCIALIZATION OF THE SCHOOLS.

War conditions pushed the work of the schools beyond their established limits, thereby calling attention to new forms of service as possible to them. Their emergency work created a demand for their greater socialization with a view to more direct practical service than was rendered under the old régime. But in studying the fluctuations in educational values the school men of these countries show no

inclinations to alter their programs in accordance with immature demands.

Prof. Beckman, of Sweden, points out that the new lines of work urged upon the schools are of two kinds—new ideal ones that really belong to the schools, and practical ones, like service needed by the State. A number of duties strictly belonging to the homes have been thrust upon the schools—the care of children's teeth, managing children's savings banks, etc.; but in the mass of its new duties, adds Prof. Beckman, the schools must not lose sight of their intellectual, ideal and ethical work.

PEACE MOVEMENTS.

When the Ecclesiastical and Educational Department of Prussia issued a warning against teaching history in a spirit to glorify war or to incite nations against each other, a Norwegian school journal said that the teachers of Norway had diligently—at times too diligently—sought guidance for their school systems from Germany, but here they had at last something fully worth their attention. The view of history instruction, says the Skoletidende, which has prompted the warning of the Prussian Department of Instruction, has universal application. In the National Association of Folk School Teachers in Gothenborg, August 13–15, ways and means to cooperate with other nations in the interests of peace were earnestly discussed.

The association declared itself in favor of active participation in movements with respect to peace; of cooperation with teachers' associations of other countries, and also for the appointment of an international commission, whose duty it should be to inspect the textbooks in history with a view to neutral requirements and international amity.

Movements against war and the spirit of war are on foot in many forms by teachers' and clergymen's associations and by political parties. In its platform and campaign program the Liberal Party in Sweden has a plank maintaining that it devolves upon the schools to work with all their might to secure permanent peace among the nations of the world. The peace sentiments of the Party of the Right (the conservatives) are expressed in connection with the duty of maintaining religious instruction in the schools in "bringing up Sweden's people in the fear of God and in a moral and healthy outlook on life."

DENMARK.

In Denmark there is no immediate prospect for continuation schools such as those provided by law in England and Sweden in 1918 and in Germany by the new Constitution of 1919. In Denmark

the system of folk schools permits children to finish one stage of the elementary work at the age of 11 and another at 14. At the age of 18 they may resume work in the well-known people's high schools, where they continue the study of cultural subjects, trades, and vocations.

In this type of schools Denmark has anticipated educational principles that are now in the process of realization under the new continuation laws of several countries. When such a law was passed in Germany educators there at once began to consider whether the required reorganization could not profitably follow the Danish type, allowing, of course, for such modifications as local and national needs would demand. In carrying out the intents of the education act of England the same procedure of encouraging "local schemes and private enterprise" must be heeded. The Danish school, by educating the pupils back to the farm and the trades has reached a fair solution of the problem connected with the education of the agricultural laborer and the craftsman. It is not unlikely that some modification of the folk high schools "will find its way into the local scheme for continuation schools which the British board of education requires."

The features of these schools which touch present needs are their democratic appeal and patronage; low tuition fees and living expenses; distribution of the school work so as to leave pupils free for remunerative employment a part of the time; directness of the instruction toward attainable ends; social cooperation among the students and teachers; ethical and moral basis for achievement in the vocations; general aim of the craftsman's skill and a liberal education.

NORWAY.

One of the leading school questions in Norway is whether the time for the training of teachers should be extended from three years to four. The added fourth year would entail additional expense and deduct a year from the time of the teacher's service. The contention is also made that the fourth year in actual service would be a fair compensation for that much longer theoretical training. The teachers now in service do not look with favor upon the distinction in professional fitness that would be made by the creation of a fourth-year class with the foreign-language studies such training would include.

The debate on the projected teachers' college has turned on the question of establishing this institution either independently or as a part of the University of Christiania, with university professors in charge of the instruction. Dr. Hoverstad, who is the promoter of the new institution, believes that in order to serve equally well the needs of both country and city it should be located in a country town, but near either Bergen or Christiania. As outlined by him, its aim

should be to impart general culture along three main lines with a chief branch of instruction characterizing each line, as science, history, religion. There should be a department for labor and one for teachers of the practical vocational branches, with special needs of the faculties for the continuation schools.

Obligatory continuation schools are under consideration in Norway. Early in 1919 the department of education, upon the instance of the teachers' association, appointed a committee to prepare a draft for continuation and vocation schools. This committee was, however, directed to prepare its draft for the cities only; a special committee, it was thought, would be needed to prepare a similar draft for the rural districts. As some delay occurred in appointing the second committee the department of agriculture took up the matter directly with the Storting, urging that steps be taken with the view of cooperation between departments for general education and for practical work. The agricultural heads suggested that the committee on obligatory continued instruction in the rural districts be required to give attention also to the ordering of instruction in domestic science in these schools.

While in America the work in the grades is expanding upwards, with a tendency to encroach on the domain of the high schools, causing these, in turn, to extend into the domain of the college, the secondary schools of Norway have moved upward without commensurate upward advance of the folk schools and middle schools. Hence arises the demand to improve the folk school and to unify it organically with the entire system. The "unity school" (Enhetsskole) problem in all its significance is consequently before the people. The plan suggested in the committee's report to build a two-year middle school on a seven-year folk school was found inadvisable. To appoint a new State committee to work over old and new data with the hope of submitting more acceptable recommendations is not regarded with favor. Educators, laymen, and the press are now giving it attention and submitting recommendations independent of committees.

The present system includes a five-year folk school, four-year middle school, and a three-year gymnasium. As the folk school must be expanded, the present superstructure must be altered accordingly. At present general opinion seems to favor a rearticulation exceedingly direct, but almost alone of its kind in Europe—a five-year gymnasium continuing from a seven-year folk school, eliminating the middle school. Some form of segregation of the pupils would take place at the end of the fifth year of the folk school, whereby certain ones would be found gifted in practical lines in which shorter courses would meet their needs, while others would proceed in the direction of the gymnasium and the university.

SWEDEN.

In Sweden the proposition to merge the two supervisory boards—the one for the folk schools and the one for the secondary schools—was approved by both chambers of the Riksdag on April 9, 1919. Instead of special boards within the folk-school board to control vocational schools and others, the proposition adopted coordinates all boards for folk schools, as well as secondary schools, into one central department of control, within which each class of schools holds an independent and coordinated rank.

Greater unity also among the various classes of teachers' training schools is the purpose of a proposition now pending before the Riksdag. At present there is too much separateness, for there are independently constituted training schools for primary teachers, for folk-school teachers, for normal-training-school teachers, and for teachers of advanced secondary schools. The Riksdag is asked: (1) To have the training schools for primary teachers taken over by the State, whereby better inspectorship and closer articulation with the training schools for folk-school teachers would be secured; (2) to lengthen the courses from two to three years; (3) to make the entrance requirements the same as those for folk-school teachers; (4) to make the professional eligibility for the two classes equal; (5) to provide practice schools at the primary seminaries for at least the first three years.[1]

According to Verner Ryden, the most important school question in Sweden at present is the organization of the continuation schools in accordance with the law of extended obligatory attendance as adopted in 1918. This law requires every community to establish a sufficient number of continuation schools, to be in operation by 1924. Every pupil completing the folk school is required to attend, unless excused for special reasons; lack of means is not to be a reason for such excuse. The obligatory instruction comprises 360 hours, which are to be completed within two or, by exception, within three years.

The law is expressly designed to meet local educational needs. As an especial individual need is instruction in the future life work of the pupil, the main subjects of instruction have been selected with this need in view, hence three main lines—practical work, sociology, and the mother tongue. Instruction in religion is not obligatory, but moral training is to be imparted in connection with the other subjects.

These continuation schools are designed mainly for pupils who expect to enter a practical calling involving actual manual labor. Those responsible for the law did not lose sight of the general theoretical and intellectual schools that should eventually be the com-

[1] Folkskolans Vän, June 25, 1919.

pletion of the continuation system. Though they began with the practical trends in the development, preliminary work is already in progress looking to the establishment of schools for general education, with work chiefly intellectual. By organically fitting these two types into the system, the folk school will find its right place as the common foundation.

To insure the full results of the new organization, educators like Bergquist and many others hold that it will be necessary to segregate the pupils according to natural gifts and capacities, in order that those ranking high in natural endowments may not be retarded in their progress by the others.

In the contemplated division they are avoiding in Sweden the implication of a higher and a lower order of gifts, preferring the basis of special or individual endowment. They are aware that to classify pupils officially as superior or inferior in gifts would have a psychic effect upon them and their parents that would do incalculable damage.

The "study of the home and community" (Hembygdskunskap) is an obligatory part of the instruction in the primary schools in the ages 7 to 9 and in the first and second classes of the folk schools with pupils in the ages of 10 and 11. It is a part of the curriculum in teachers' training colleges, both in those that train primary teachers and those that train the teachers of the folk school. Moreover, it is taught in the coeducational schools and to some extent in the general secondary schools.

Home and community study makes the school a part of the vital everyday life of the community; it keeps the school from being isolated as a thing apart from the other activities and interests of the neighborhood.

The teacher finds that some phases of home life can be cast into a form suitable to be taken up with the pupils; he finds instruction material in the school garden, in the woods and fields, with the trade, traffic, and shops of the neighborhood, in the community's natural features, in its landmarks and history. If the community can not be brought into the school, the school can go out to it and come in touch with it.

This study is so managed that the folk school is not thereby crowded by the introduction of a new subject. The hours scheduled for geography, natural history, physical exercise, and singing are, according to circumstances, released so that the teacher can have these hours for the necessary trips and visits.

"Home and community in the schools" is impelling teachers to a departure from old methods. Teaching is no longer exclusively a matter of books, papers, and the teacher's voice. It is not always necessary to make the young pupil sit still and keep still while he

is taught; he may retain some freedom in the exercise of limbs and lungs according to his natural impulses. Singing and rhythmical bodily movements are brought in among the lesson exercises.

The subject also forms a natural transition stage from the home to the school, whereby the young pupil is permitted to find himself naturally and comfortably in the school régime. It emphasizes continuity as an essential; the pupil's education does not begin with the first day of school, but connects with earlier stages. After the last day the pupil does not have to begin his acquaintance with the environment or the field of future duties, for this has been a part of the courses at school. The work moves from proximity to remoteness. The pupil is placed in the organized busy neighborhood and enabled to occupy himself with what is going on there.

While in the United States every phase of the work here described is paralleled in detail in many school activities and pursued under the advantage of equipment not yet existing elsewhere, Sweden has incorporated it as an obligatory unit ranking with subjects long established in the curriculum.

The character of the work as in vogue in the elementary schools points to the development of courses for adults. These are under consideration, but have not yet been carried out except in the courses for teachers. But the trend is to establish lecture courses for home and community study in which will be taken up (1) the natural features of a locality, their interest and conservation; (2) history, the literature, legends, songs, early history, and landmarks of the locality; (3) industries—present conditions, undeveloped resources, opportunities.

IV. THE SCHOOLS OF GERMANY AND THE NEW CONSTITUTION.

GENERAL TREND IN SCHOOL MOVEMENTS.

In Germany the schools are struggling with new arrangements, which, so far as they have developed, point toward greater unity in organization and greater independence of the teachers. Like the Constitution of Switzerland, that of Germany contains general fundamental laws about the mutual relations of church, school, and state, and the minimum requirements in the folk school; beyond this each State is independent. The States are consequently engaged in elaborating the school regulations and adapting them to the fundamental law of the German Constitution.[1]

In these reorganizations, Prussia and the metropolis, Berlin, are taking the lead. As there is no doubt that under the new Constitu-

[1] Schweizerische Lehrerzeitung, July 26, 1919.

tion Prussia has been reduced politically by curtailing the influence of the Junkers, the other States are suggesting that she has now the opportunity to attain an educational supremacy equal to her former political one.

INSTRUCTION IN RELIGION.

As early as November 27, 1918, Adolf Hoffmann, minister of instruction, made public a circular relieving teachers from the duty of imparting instruction in Christianity unless they voluntarily wished to do so. Neither were parents required to have their children participate in such instruction. When the children had completed the fourteenth year they were permitted to decide for themselves whether or not they wished to take part in religious instruction. As immediate opposition arose against this proclamation, the Government, under its pressure, issued an order on December 28, whereby its enforcement in Prussia would be postponed until the Prussian National Assembly should have time to act.

But the teachers of Prussia were not in favor of any backward step. They were disappointed by the vacillating position taken by the Government. Speaking through the Allgemeine deutsche Lehrerzeitung, they said "that it would appear that they can not expect any furthering of their most vital concerns and protection of their plainest rights from the present Government; and that at a time when self-government is extended to school children, teachers should not permit themselves to be pushed back into servile dependence."[1]

The continued discussion in which ministers and bishops, among them Von Hartmann, of Cologne, took part led to the circulation of petitions, particularly in Berlin, to maintain religious instruction in the schools virtually at its old status and under the former system of supervision. The position maintained by these conservatives is stated by Frederich Naumann, quoted in the Allgemeine deutsche Lehrerzeitung for January 9, 1919:

> Never before have we had less time and occasion for sectarian culture contentions than now. This statement has its particular application to the rash and crude way in which the separation of church and state in some neighboring States is brought about. A union grown up and confirmed for centuries can not be dissolved during an afternoon by the stroke of a pen. Through injury of its religious feeling, the people as a unit may sustain most serious damage. After the departure of the State rulers it would be expedient to provide for the more free relations between the state and the church. Religious instruction in the folk school needs to be reorganized in order to remove it from the character of compulsion. Should, however, the German Republic wish to appear as an anticlurch party organization, it would soon be digging its own grave, for after these bloody times of terror and distress the people have not grown less churchly, but rather more inclined to lend an ear to those who tell them of things beyond this earth.

[1] Schweizerische Lehrerzeitung, Feb. 15, 1919.

Later in the spring, when the position of the German people with reference to the relations between the church and the school was to be defined in the German Constitution, there appeared such divergence that some States, particularly those of south Germany, protested against taking up these matters. In the general conference on the order of procedure before the committee on the "Arbeitsprogram" it was resolutely insisted that the Constitution should contain something on the relations between the church and the state and the general principles to govern the public system of education. This view prevailed, so that the reading of the first draft of the Constitution, which had been altered during the discussion, was restored.

In reducing the principle adopted into form for legal enactment the debates before the parliamentary committee showed that three distinct views appeared, each supported by a political faction. The Conservatives and the Center insisted that religious instruction should be a regular subject on the school program and be imparted under the control and supervision of the religious organizations in the community. The majority of the "Socialdemokraten"—by no means all of them—held that religious instruction should be removed from the schools and be left to the religious organizations. The German Democratic Party demanded that religion should be a regular subject of instruction in the school when so ordered by the State, and that it should then be under the control of the State.

The result of the deliberations as embodied in the Constitution of the German Republic, adopted July 31 and confirmed on August 21, 1919, is reported in the Schwezerizsche Lehrerzeitung August 30, 1919. Upon request by the legally qualified patrons of education schools may be established within the communities in accordance with the religious doctrines or philosophy of life (Weltanschauung) there prevailing in so far as the regular educational work suffers no interference by schools of this kind. Consequently the authorities within the communities will decide whether a denominational or undenominational school is to be maintained. Stress is laid on the regard that must be shown by the educational authorities for the differences of belief and opinion that prevail there. Such regard, according to another clause, permits a minority of legally qualified patrons to have a separate private folk school established where no public school of their confession or their philosophy of life exists, or where the educational authorities wish to further an educational purpose of special interest.

To impart instruction in religion or to assist in church activities is optional with the teacher. With those who have charge of the religious instruction of the child it is optional to determine whether or not the child shall take part in the instruction in religious subjects and in church acts and solemnities. The theological faculties of the

universities are to be maintained. The legislative assemblies of each State will issue more specific regulations in accordance with the principles of an amendment later to be embodied in the Constitution.[1]

Obviously the committee on Constitution was not sure of its ground when it formulated the regulations for instruction in religion. The opposition that had developed against the first radical steps, the conflicting views held by political parties and teachers' associations, led to the postponement of the main difficulty by promise of a supplementary enactment. In the meantime the State and the community will struggle as well as they can with the difficulty of conducting the instruction in religion both under State supervision and in accord with local doctrinal principles. It seems also that the problem is complicated by the twofold basis adopted, namely, religious doctrine and philosophy of life.[2]

THE EINHEITSSCHULE.

In its issue of April 19, 1919, the Allgemeine Deutsche Lehrerzeitung says:

> The fundamental idea is not to provide all Germans with the same education, but to provide for all of them an equal opportunity to acquire an education corresponding to their respective capacities. Every pupil is not to be prepared for a university course, or even all who think themselves obligated to take such a course in order to support the social rank of their parents. The "Einheitsschule" is designed to put every pupil in his proper place, to see that every one gets all the education that he can profitably utilize. It is no longer to be left to the biased and incompetent opinion of the parents to decide what education their children shall receive.

To attain the ideal of equal opportunity independent of wealth or standing, it has been advocated to make the elementary courses uniform for all. The idea of uniformity has been heeded in the Constitution by providing that the school system be organically built up and developed. From a foundation school common to all pupils the secondary and advanced schools are to be built up, eight years of obligatory folk school with continuation instruction till the completion of the eighteenth year. The variety and the scope of vocations and life duties are to determine their development and organization. The admission of a child to any certain school is to depend on its gifts and inclinations, and not upon the economic or social position of its parents or upon their religious views.

As the first step toward this end, it was necessary to abolish the private preparatory schools, which in some parts of north Germany

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[1] Schweizerische Lehrerzeitung, Aug. 30, 1919.

[2] Article 149 of the Constitution makes religion a regular branch of school instruction, except in the case of schools acknowledging no creed, or "worldly schools." The same article states, however, that no teacher is required to impart instruction in religion and that no pupil is required to attend such instruction.

had attracted the mass of children, to the depletion of the folk schools. Again, the framers of the Constitution felt that if there was to be a uniform system of schools there must be a uniform system in the training of the teachers. Hence they placed this training under the direct control of the Republic, with the view of making it an organic entity throughout. Such instruction is therefore not to be given in detached institutions or in those working out of relations to one another. The regulation about school inspection was obviously made with the same purpose of uniformity in mind. The duty of inspecting the schools is vested in the State; it is to be conducted by State appointees especially trained as experts in their work.

THE TEACHERS AND THE NEW RÉGIME.

The new Constitution invests the teachers in the public schools with the rights and duties of State officials. The constitutional proviso according to the present trend of development will be expanded by each State so that the school will become a community institution and the teacher a State official. Judging from the views promulgated in Bavaria, the State should have the power to nominate, elect, and dismiss a teacher and fix his salary. All functions of this kind should, according to the same trend of opinion, be removed from the communities. The National Constitution exempts him from the duty of assisting in the church service as chorister or otherwise.

The German Teachers' Association, in a memorandum to the committee on the Constitution, requested the embodiment of three points in the final enactment:

1. That the proviso, the teacher of public schools shall have the rights and duties of Government officials, should be replaced by the reading, "Teachers of public schools are Government officials."

2. That the privilege of free tuition and free instruction material shall be extended beyond the folk school to advanced institutions.

3. That communities as organizations for religious purposes shall not have the right to supervise religious instruction through persons especially appointed for that purpose.

The Constitution as adopted disposed of points 1 and 3, retaining the reading that teachers in public schools shall have the rights and duties of Government officials, and point 3 by leaving the right of supervision over religious instruction a matter for the State, with concessions to the communities. Point 2 is left to be dealt with by the State legislative assemblies.[1] The liberal trend of legislation affecting the standing of teachers may be inferred from the draft of an emergency school law adopted by the People's Assembly in Saxony. A clause of this law makes the election of the school principal the

[1] Schweizerische Lehrerzeitung, Aug. 30, 1919.

duty of the faculty of the school. Again, it provides that the local school board shall be made up to the extent of one-half of its membership by representatives of the community and one-fourth each of parents and teachers.[1]

From teachers' associations and educational authorities come frequent statements that Germany's course to recovery from her frightful losses lies through improved opportunities for all in a better ordered system of instruction. President Ebert asserts that the Republic, the State, and the community will now be more dependent than formerly on educated people. The Government employees and officials, including the teachers, will have greater privileges than before with respect to concerted action toward remedying unsatisfactory conditions. Such service on the part of the teachers is not regarded as inconsistent with their own expressed wish to keep education out of politics, for they have also declared that they will, as long as possible, cooperate with the ministry that furthers their wishes as in harmony with the course of State events. In these endeavors, party affiliations will be left out of consideration.

With the launching of the idea that the teacher is needed in politics comes a statement from a teachers' representative journal emphasizing the importance of keeping the notions of politics and partisan politics clearly apart. Among the representatives are too many who represent the interests. If the teachers are to represent any interests, it must be that of the folk school, not that of the teachers.

Not only are the teachers by the pressure of events brought into politics, but politics is brought into the schools as a subject of instruction. The Constitution just adopted provides that instruction shall be given in the civic organization of society, in social outlook consistent with the spirit of the German people, and the reconciliation of the peoples of the world.

THE EXTENDED OBLIGATORY PERIOD.

The extension of the compulsory period till the completion of the eighteenth year requires attendance at continuation schools which will be developed into secondary and vocational schools. This entire system of trade and vocational schools is to be so coordinated with the public schools for general education that they, too, prepare for higher institutions. During the past 15 or 20 years continuation schools have developed their own characteristics in which preparation for a calling predominates. Among these schools—most of them trade and vocational—no inner relation exists. They do not articulate with one another or with the advanced schools for general

[1] Ibid., Aug. 23, 1919.

education. They have grown up under the needs of separate localities, with local characteristics predominating. Among these there is no regular course of progression from elementary types to the more advanced. Each is complete within itself.

Moreover, through the effects of the new law extending the obligatory time, these schools will receive a large influx, probably as high as 90 per cent of the total number leaving the folk school. In the "open road for the gifted," educators have had in mind mainly the 10 per cent or less who proceed in the straight continuation toward the universities, not the 90 per cent who enter the callings and the trades. To provide the open road for the gifted has meant in the discussions those gifted with reference to university studies. But if each one is to be placed where his powers, inclinations, and ambitions have the best opportunities, the interests of those inclined toward the vocations must also be heeded. How the advancement of these is to be made till the completion of the eighteenth year so as to satisfy the new law constitutes an immediate problem, namely, to devise study programs that lead with satisfactory continuity from the vocational studies to advanced work in political science, languages, and aesthetics.

Closely bound up with reorganization under the recent continuation law is the "selection and advance of gifted pupils." Since the war greater significance is attached to efforts of this kind than formerly. In the general discussions it is continually urged that the State make the fullest use of all gifted pupils in order to recover from the appalling losses of the war.

Among educators and patrons of education there is satisfactory agreement that neither social position nor lack of means must keep a talented pupil from the instruction that will most fully develop his talent. But beyond that the discussion tends back to fundamentals—how to recognize talent and when and where to make the selection. Thus far the ground gained appears to be that a selection along broad and general lines should be made in the folk school, with consequent slight differentiation of the curriculum for the resulting divisions; other classifications to be made at stated times during the continuation period with final selection before the portals of the university. To help in the selection of the gifted, which in many cases is tantamount to the choice of a calling, it is urged that the theory of vocational selection should be brought into the courses of study and that individual conferences with pupils should be held. It is pointed out that gifts in the sense of school requirements and life requirements are not the same, as the vast number of cases in which talent has manifested itself only after school days will testify. Whether the selection is to be determined by continued observation of the pupil's ambition, his achievement, or his intelligence, or by

all these modes, the total worth of the individual as to integrity, ambition, and capacity is to decide. In these segregations the German educators are not overlooking the moral and psychic damage that would be inflicted by officially pronouncing pupils as inferior, hence they are avoiding designations of this kind.

Practically the selection of the gifted means a separation into classes where division A is capable of more rapid advancement than division B. But if one division can do the same work in, say, half the time of the other, the division making the more rapid progress would reach the secondary schools before the age requirements would admit them to these; hence it is thought advisable to defer this classification till the last two years of the required period. On the other hand, it is pointed out that early graduation would not be objectionable in view of the lesser age of university students of former times, and, again, that early graduation would permit of earlier service to the State.

SCHOOL REFORMS IN SEVERAL GERMAN STATES.

Though the school reforms in Prussia were looked upon as indicating the general course that should be taken, independent movements uninfluenced by Prussia were started elsewhere. Some early regulations were evidently of a temporary character, issued under the pressure of popular demand and subject to ratification by the State Assembly. In Baden the minister of instruction summoned the entire body of teachers to cooperate with him through committees to reach arrangements in accord with the new outlook. Bavaria, in resuming work on the school laws after the war, found that the new order required her to proceed along altered principles.[1] Some of these reforms were regarded with apprehension by the private schools. The extreme measures toward socialization of all educational institutions caused the supporters of the private schools to seek affiliations with the conservatives in politics. With private school educators the position taken by the Minister of Education Haenisch was more acceptable than that of Hoffman, in so far as the former appeared to institute reforms by building upon and improving what was already established. In expectation of what might come, the private schools began to publish exhaustive arguments in defense of their institutions.

The first move against them came in Saxony, where the people's representative for the department of education made public an order to take effect on January 1, 1919:

Supervision of schools by religious bodies is abolished. Schools that have no superintendent (direktor) are under the supervision of local school authorities.

[1] Schweirzerische Lehrerzeitung, July 26, 1919.

From Easter on tuition at folk schools and continuation schools will be free and the entire folk-school system reorganized in accordance with the principles of the "Einheitsschule." Religious instruction will in the future be imparted in such a way that no religious organization will come to suffer thereby. *Permission to establish private schools will no longer be granted.* New elections conducted in accordance with democratic principles shall select school boards.[1]

This order brought out a protest from the supporters of private schools, in which, among other things, it was stated that the National Assembly of Saxony was the proper body to issue such regulations.

The new national constitution defines the position of private schools by stating that, as a substitute for public schools, they shall require the approval of the State, and that they shall be entirely under the control of the State.

Approval is to be granted when the private schools are equal to the public institutions with respect to their educational aims and arrangements as well as in the training and education of their teaching force, and provided, further, that they are so organized and managed that they do not cause a division of their pupils on the basis of the economic conditions of the parents.[2] Approval is to be withheld when the economic and legal status of the teaching force is not satisfactory.

A report published in the Schweizerische Lehrerzeitung for June 14, 1919, states that on May 8 the minister of education made public the regulations for organizing teachers' councils in Bavaria, an announcement hailed by the teachers of Bavaria as a veritable decree of their emancipation.

A series of teachers' organizations—community, district, and city, each a separate working unit—forms a national council of folk school teachers having the duty of cooperating with the Government school authorities. They will be expected to take the initiative toward furthering the interests of the schools and to guard the professional and social interests of the teachers. The announcement specifies the manner of electing the members of the district, city, and national councils, and the duties of each of these bodies. School inspectors are not eligible to membership. The city council is to provide teachers' representation at sessions of the community authorities. The district council represents the teachers when school questions, like school supervision, organization, and the appointment of inspectors, are to be decided. The authorities may also summon the council or any of its members for conference on school matters.

The National Council (Landeslehrrat), elected by the entire number of folk school teachers, consists of 16 members and 8 alternates.

[1] Zeitschrift für Kinderforschung, December–January.

[2] The history and present status of the private schools seem to show that it is exceedingly difficult to conduct them without causing such division.

This council represents all the teachers in sessions with the minister of education where questions of a fundamental character affecting teachers and schools are taken up. In these matters the National Teachers' Council has the right of initiative. The ministry of education can summon the National Council or any of its members to a conference. Upon request of the National Council the ministry will send representatives to its sessions. The fact that the National Council represents folk school teachers only is open to criticism, but it is obviously only a first step which will lead to similar councils of all secondary schools and eventually to merging all these in one body fully representing the teaching forces of the country.

PART III.

ACTIVITIES OF THE BUREAU OF EDUCATION.

ITS PLACE IN THE NATIONAL GOVERNMENT.

The Bureau of Education is the principal educational agency of the United States Government. It is the one organization in the country whose outlook embraces the Nation, and whose scope includes every degree of the business of education. It performs no considerable executive function of its own. It tenders information, and it gives specific advice, when advice is asked, but neither the bureau as an entity nor its officers as individuals need concern themselves with the execution of plans proposed for the improvement of any educational condition. Its interests do not, therefore, encounter those of any other agency, and there can be no reason nor excuse for jealousy or hostility toward it.

The members of its staff are wholly free from local bias. They are in constant contact with the best educational practice throughout the country, and their understanding of educational movements comes not only from personal study but from frequent discussion with leaders in the several lines of education.

It is natural that the place of the Bureau of Education in the affairs of the Nation should become larger with each succeeding year. In its beginning, in 1867, its influence came in great measure from the personal prestige of the distinguished educator at the head of it, Henry Barnard; but each of the able men in the line of commissioners who followed him has done his part in strengthening the position and in extending the activities of the bureau. It is now approaching its full stature as an advisory organization. The value of its services is generally recognized, and the place of leadership is ungrudgingly conceded to it.

The experiences of the war gave convincing evidence of the usefulness of the bureau, and added greatly to its prestige. No important step involving education was taken without the participation of the bureau or of its officers. The Students' Army Training Corps was proposed by one of them, and he aided materially in its development, and in the development of the permanent training

scheme of the Army which followed it. In its relations with the colleges and educational institutions generally, the War Department constantly sought the assistance and advice of the bureau. Not only the Bureau of Education, but the Federal Board of Vocational Education, of which the Commissioner of Education is a member, was called upon freely in planning and conducting the industrial training of soldiers and sailors. A member of the staff of the bureau was commissioned as an officer in the Army in order that he might aid the more effectively in directing the educational work in behalf of soldiers in the military hospitals. The bureau cooperated closely with the Council of National Defense in the organization of community centers as an effective means of popular cooperation in the conduct of the war. The Capital Issues Commission relied upon the judgment of the bureau in authorizing or declining to authorize the issue of bonds for constructing schoolhouses. The President of the United States directed the Commissioner of Education to cooperate with the Food Administration in the preparation and distribution of a series of Lessons in Community and National Life whose purpose was to aid in the maintenance and the upbuilding of the national morale, through the medium of the schools of the country. With the approval and by the direction of the President, the Commissioner of Education conducted a vigorous campaign for the maintenance of the schools at full efficiency, notwithstanding distractions and difficulties due to the war. The President also assigned to the Bureau of Education important sums from his "emergency fund" for encouraging the production of food by school children; for aiding school boards to find teachers; for hastening the Americanization of aliens; and for raising the level of intelligence of the people by means of educational extension.

The mention of these facts is not by any means an enumeration of the services of the Bureau of Education during the war and in the reconstruction, but an indication of its place as a factor in the National Government. In accordance with its traditions it did not in any instance actually control the essential activities named, but its influence in them was none the less direct and important.

SURVEYS.

In relation to the schools and other educational institutions of the country, the functions of the Bureau of Education are purely advisory, and they are still exercised principally through its publications, which are necessarily of general application, as a rule. But more and more the personal element is entering. "Surveys" and "conferences" are bringing the specialists of the bureau into direct contact with the administration of educational affairs.

Although surveys have recently become a conspicuous feature in educational work, the idea is not by any means new. The first important work done by the Bureau of Education was a survey of the public schools of the District of Columbia. The act to establish the "Department" of Education was approved March 2, 1867. Only a few days later, on March 29, the President approved the following resolution:

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the Commissioner of Education be directed to ascertain the number of children resident in the District of Columbia over the age of 6 years and under the age of 18 years; the number of said children that are blind and the number that are deaf and dumb; the number and character of public schoolhouses, number of teachers, and the number of pupils in attendance; number and character of school libraries, character of textbooks used, average period per annum each pupil is taught, and cost of tuition, with incidental expenses of said schools, and report the same to Congress at its next regular session, together with his opinion of the relative efficiency of the system now in force in said District, and whether any additional legislation is necessary in order to secure the advantages of said system to all of said children.

The report of the survey was published in a volume of 912 pages as the "Special Report of the Commissioner of Education on the Condition and Improvement of Public Schools in the District of Columbia." In the thoroughness of the investigation and in the wealth of comparative material in the report, it has rarely been equaled in the history of educational surveys. It was done in Henry Barnard's characteristic style.

The next survey which the Bureau of Education was called upon to make was in 1892, while Dr. W. T. Harris was commissioner. Once more the schools of the District of Columbia were investigated, this time in accordance with the following provision of the Act of Congress approved July 14, 1892:

The Commissioner of Education is hereby authorized and directed to examine and report to Congress, on the first day of its next session, on the schools of the District of Columbia, as respects their organization, efficiency, methods and cost, and with said report make such recommendations as to him may seem advisable.

Only $500 was appropriated for the work, and the portion of that sum which was expended went almost entirely for carriage hire for taking the "surveyors" about the city. The entire report was included in a leaflet of 15 pages which was published as a Senate document.

The bureau's third survey was made in 1911, under the direction of Commissioner Elmer Ellsworth Brown, and it covered the public schools of Baltimore, Md. The report of it is contained in Bureau of Education Bulletin, 1911, No. 4.

During recent years the survey idea has had wide extension, and this bureau has been repeatedly asked to conduct such examinations. It has responded favorably whenever it was possible to do so, and 39 surveys in all have been undertaken by the Commissioner of Education. In some of them all the educational activities of entire States have been investigated; in others only certain phases of education were considered. Four counties and twelve cities have been surveyed separately. The higher educational institutions of five States and four individual institutions have also been investigated. In all those instances full reports were made to the officers concerned and complete and detailed plans were presented for the improvement of the conditions that were found.[1]

During the year 1918–19, surveys of two entire States, South Dakota and Alabama, and of two cities, Columbia, S. C., and Memphis, Tenn., were completed. In addition, the survey of Lexington, Ky., was begun, and those of the Territory of Hawaii and the District of Columbia were planned. Still others are in contemplation.

PUBLICATIONS.

For reasons which were stated in the Report of 1918 and elsewhere, this bureau no longer makes an annual report in the extended form of former reports. This document is an example of the Annual Reports which will be issued hereafter. A "biennial survey" will be prepared in the even-numbered years and will correspond substantially to the annual reports issued before 1918.

The first volume of the Biennial Survey will contain an interpretative review of the progress of education in the United States and all other culture countries; the second will contain statistics of education in the United States. The several chapters of each volume will be printed and distributed separately, and a small edition of the complete volumes will be issued, principally for the use of libraries.

The demands of the war upon the Government Printing Office, made directly and indirectly, caused a marked decrease in the publications of the Bureau of Education during 1918. In the latter half of the year the list contained only (1) a few bulletins ordered long before; (2) the regular numbers of the periodicals, "School Life," "Americanization," and "Monthly Record of Current Educational Periodicals;" (3) necessary reports, including those of four surveys conducted by the bureau; (4) eight advance chapters from the

[1] The surveys were as follows: States: Alabama, Arizona, Colorado (administration and finance), Delaware (rural schools; in part), District of Columbia (1867, 1892, and 1919), Hawaii, South Dakota, Tennessee, Washington, Wyoming. Counties; Nassau, N. Y.; Bell, Tex.; Fall, Tex.; Walker, Tex. Cities: Baltimore, Md.; Columbia, S. C.; Elyria, Ohio; Jamestown, N. Dak.; Lexington, Ky.; Memphis, Tenn.; San Francisco, Calif.; Webster Grove, Mo. Higher Institutions: Iowa; North Carolina, North Dakota (3), Oregon, Virginia. Individual institutions: University of Nevada; University of Oregon; Bradley Polytechnic Institute, Peoria, Ill.; Agricultural High School, La Crosse, Wis.; Industrial; Richmond, Va.; Wilmington, Del.; Gardens: Atlanta, Ga.; Richmond, Ind.

Biennial Survey of Education; and (5) a number of "leaflets" and brief "circulars," of which nearly all were directly in relation to the war.

The pressure of war work upon the Government Printing Office did not cease immediately after the armistice, for great numbers of blank forms and the like were required for the demobilization of the Army; but in 1919 it has been possible to have a number of documents printed which is far in excess of anything which has been done in any other similar period of the bureau's history.

Periodicals.—To enable the bureau to reach a much larger number of those persons who are directly interested in its work than can be reached through the very limited editions of its reports, bulletins, and leaflets, near the beginning of the fiscal year was begun the publication of two journals—one, School Life, a 16-page, semimonthly journal, of each edition of which approximately 40,000 copies are mailed to universities, colleges, normal schools, State, county, and city school officers and to libraries and to newspapers; and, second, the Americanization Bulletin, the title of which was later changed to "Americanization," a monthly journal of 16 pages, which began with an edition of 10,000 copies, increasing to 22,000 to meet the growing demand for it by societies and individuals directly interested in the work of Americanization.

In December, 1918, the bureau took over School Service, a semimonthly paper of from 16 to 24 pages, which had been published since early in the fiscal year by the Committee on Public Information for the purpose of giving teachers and pupils information as to the progress of the war and the more important activities of the Federal Government. This publication was continued by the Bureau of Education until May. Of each number 650,000 copies were printed and mailed to all the public and private schools of the United States in quantities sufficient to give one copy to each teacher. After the middle of the year the bureau took over Library Service, a publication which had been begun by the Food Administration, and has continued its publication at irregular intervals. The purpose of this publication is to give public libraries constant information about the organization, the activities, and the publications of the various administrative departments, bureaus, and boards of the Federal Government. For this information there is great demand, and librarians everywhere have expressed themselves as greatly pleased with this service. The publication of School Life, Americanization, and the Library Service is continued, but it is impossible to continue School Service without a special appropriation of not less than $150,000 a year. Since the very important task of giving to children in the schools reliable information about the progress of the

world and creating in them an intelligent interest in the affairs of the Government can not be performed half so effectively by any other agency, it is to be hoped that the means may be furnished for its revival and continued publication at an early date.

COOPERATION WITH PRIVATE ORGANIZATIONS.

The clause in the appropriation bill of 1917, which became effective July 1, 1919, makes it illegal for any governmental official or employee to receive any salary in connection with his services as such official or employee from any source other than the Government of the United States, except as may be contributed out of the treasury of any State, county, or municipality, and forbids any person, association, or corporation to make any provision or in any way supplement the salary of any Government official or employee for services performed by him for the Government of the United States. Therefore, the cooperation of the Phelps-Stokes Fund, through which for more than seven years this bureau had made very valuable studies in the field of negro education; the cooperation of the National Kindergarten Association, which had assisted the Bureau of Education in its work of promoting kindergarten education; the cooperation of the National Congress of Mothers and Parent-Teacher Associations, through which the Home Education Division of the bureau had been maintained, and the cooperation of the Child Health Organization of New York, which had for a year been very helpful to the bureau in promoting health instruction and the care of the health of children in schools, were automatically discontinued on that date. The kindergarten work, the work of the division of home education, and the work of caring for the health of children in the schools are reduced in efficiency until such time as Congress shall make good the loss by larger appropriations.

The Division of Negro Education, or the Division of Education of the Negroes and Backward Races, as it had come to be called, has wholly discontinued at a time when the need for this work is very great. It is to be hoped that the bureau may soon be enabled to take up this work upon a much larger scale and continue it until the more important problems of this very difficult part of the task of public education shall have been solved.

Another loss to the bureau, through this law, and one more difficult to supply, is that of the expert services of a number of able men, masters in their particular subjects, who held positions as professors in such private institutions as Harvard University, Yale University, Columbia University, the University of Chicago, Leland Stanford University, and the George Peabody College for Teachers, and who, without additional pay except the nominal sum of $1 per year, were giving the bureau services of a character which it could

otherwise obtain only by paying salaries to its own specialists much larger than the Government scale will permit. Congress might do the country and the cause of education a very great service by so amending this law as to permit this and other Government bureaus to accept limited services from such men in particular lines of work at nominal salaries.

THE UNITED STATES SCHOOL GARDEN ARMY.

Five years ago this bureau, through special act of Congress, began the promotion of school-directed home gardening. This work was confined to cities and towns, as earlier investigation had shown that the children of urban communities did not have educative or productive employment during the out-of-school hours and vacation periods. Although the original appropriation was small, the work proved satisfactory from the standpoint both of production and of education. When, under war conditions, the necessity for food production became urgent, the value of school-directed gardening was recognized by the President of the United States. In February, 1918, he allotted for use in the expansion of this work $50,000 from the appropriation for the National Security and Defense.

In March, 1918, the United States School Garden Army was organized. This change in name did not alter the previous policy but added to it a patriotic appeal. Two main purposes prompted the planning of the United States School Garden Army: (*a*) Increased food production and (*b*) training of school children in thrift, industry, service, patriotism, and responsibility, and giving them such first-hand knowledge of the forces and phenomena of nature and of plant and animal life as city children can not otherwise get.

To guide this new organization, a director was appointed who was responsible for organization and administration of the work. The country was divided into climatic zones, and five regional directors were appointed. The regional directors were responsible for supervision of the work and the preparation of garden lessons adapted to their respective regions.

The army plan of organization was so simplified that it could be incorporated as a part of the regular school plan, and many schools enlisted their entire enrollment of children of garden age.

At the end of the fiscal year (June 30, 1918) 1,500,000 had enrolled in the United States Garden Army. Twenty-five thousand acres of previously unproductive home and vacant lots were under cultivation. Boards of education and superintendents of schools gave their hearty approval and cooperation. Civic, commercial, and patriotic organizations joined with parents in making the work a

success. Letters of indorsement were sent out by governors of States and State educational officials. The work accomplished during the first few months was so successful that the President allotted $200,000 for its continuation during the fiscal year ending June 30, 1919.

This allotment made it possible to enlarge the field force. Twenty-nine assistant regional directors were appointed. As it was impossible to secure immediately the required number of trained persons for this work, not all were appointed at the same time. The average period of service was seven and one-half months. The assistant regional directors were assigned to one or more States on the basis of city population, and worked through the offices of the State superintendents of public instruction. In all cases State educational officials gave their full cooperation and in many instances offices, equipment, and stenographic services were furnished by the State. Commercial, social, and patriotic associations continued to support the work of the United States School Garden Army. Through the active cooperation of many agencies it has been less difficult for superintendents of schools to obtain money to pay for the services of garden teachers and supervisors.

Manuals of lessons in gardening were issued for each region. Over 4,500,000 of leaflets and 750,000 manuals of garden instruction were sent out during the year. On our mailing list for leaflets, manuals, and directions for teaching these are 40,361 garden teachers, of whom 36,558 are in the public schools and 3,803 in the parochial schools.

Moving pictures have been made of the Mary Heminway school garden of Boston, the school garden parade in Lexington, Ky., gardening in Redlands, Calif., and a three-reel film giving practical instruction in gardening. These films and several sets of lantern slides have had a wide circulation. A special assistant director gave visual instruction in gardening in 25 States. These were given in public and private schools, summer schools, normal schools, colleges, universities, chambers of commerce, women's clubs, and at meetings of the National Education Association and the Department of Superintendence of this association. Audiences varied from a few dozen to two or three thousand. More than 300,000 persons have seen these films.

Valuable assistance and support have been given by the public press. Hundreds of newspapers, including metropolitan dailies of international prominence and little four-page papers of the smaller towns, have alike given generously of their space and editorial support. Garden lessons and garden stories have been published as daily and weekly features in the most prominent sections of the

leading papers of practically every State in the Union. The total of 25 columns of space has been given by each of hundreds of papers.

News articles, ranging from one column to two and one-half columns in length, have been printed by many papers at frequent intervals throughout the spring and summer, and dispatches have been sent out through the medium of the Associated Press and the United Press.

In addition, many papers published in full the garden pageant entitled "The Victory of the Gardens," while others contained a mention of the pageant and its purpose. The pageant was made the chief feature of the closing exercises at many schools and colleges. Many playground associations have used the pageant at great play festivals in large cities.

Letters of commendation of our lessons and stories have been received from every section of the United States. Apparently food and children have once proved their inalienable right to be known as the "Common Denominators of Mankind."

Up to the end of the fiscal year an enrollment of 1,813,552 was reported for 2,125 cities in the United States. Four hundred and nine cities have not yet reported enrollments, or the reports from these cities were in the hands of the assistant regional directors and have not yet reached this office. The island possessions of the United States and Alaska have an enrollment of 114,334, making the total enrollment 1,927,886 soldiers of the School Garden Army. Reports are still coming in, and it is fairly certain that the number of gardeners enrolled will reach 2,500,000.

For three years one of the bureau specialists has been stationed in the South to make a demonstration of the plan for school-directed home gardening. Eight cities in southern Virginia, the Piedmont section of North Carolina, and in eastern Tennessee were selected. Teachers were employed by the local boards of education to work under the direction and supervision of the bureau specialist after school hours and during the vacation period. In 1917, 3,315 children in these cities produced an average of $10.15 worth of vegetables per child; in 1918 the number of gardeners was increased to 7,869, and the average per child was $19.20; up to September 1 of the present garden season the children of the same cities have produced an average per gardener of $30.35. While it has been impossible to secure similar figures from a large number of cities, other noteworthy records of production per child are from Richfield, Utah, of 208 gardeners, with an average return of $21.63; Fresno, Calif., with 3,100 children, an average of $15.48.

On the basis of a money return of $19.20 per child, the average for the 1918 garden season in eight southeastern cities, the total value of

the products for the present garden year will reach approximately $48,000,000. Many individual children gathered a harvest valued at more than $100.

This plan of school-directed home gardening is of value not alone for its economic results, but it has a large beneficial influence on the life of the child. During the period of the war and reconstruction there has been a spirit of unrest manifested among public-school children. This unrest is accentuated during out-of-school hours, because such periods are largely loafing times for city and town children. The work of the United States School Garden Army in promoting school-directed home gardening has furnished some definite occupation that has made a patriotic appeal and has a definiteness to which the child can tie. Statistics have proven that children who have definite employment are less apt to commit juvenile court offenses, and Garden Army members also cause less trouble during the school hours. The value of this work to education has been stated by one of the teachers in the Greensboro, N. C., schools as follows:

> Three years ago I was not interested in school gardening, but now after two years' actual experience teaching it, both in the classroom and as a supervisor, I find that gardening is the real, live subject in the school course. Through it the school and the home, the parent and the teacher, are brought together and it develops in the child those traits of responsibility and of stick-to-it-iveness as nothing else in the school course can.

THE DIVISION OF EDUCATIONAL EXTENSION.

Educational extension work has long been popular in the United States, and has done much to raise the general level of intelligence, efficiency, morality, and idealism of the people. The debating society, the lyceum, the Chautauqua, the fair and exposition, the reading circle, the study club, the circulating and traveling library, the correspondence school, the community center, the educational moving picture, the agricultural extension and farm demonstration work, and university extension work have all had their place and played their part so well that most of them continue to grow in popularity and power. The growing recognition of the value of the various forms of university extension work is indicated by the fact that in the past five years the appropriations for the support of this work in colleges and universities have more than doubled, and the number of students has increased more than threefold.

University extension work, other than in agriculture and home economics, is now carried on in some form in 42 States, and in the other States plans are being made for beginning it. Nearly one-half of the State universities carry on extension work as an integral part of their service to the States in which they are located. Annual expenditure for this work is now more than one and a half million

dollars. Approximately 120,000 students are enrolled for work in college carried in classes and by correspondence. Two million persons are reached by extension lectures, and five and one-half millions by visual instruction in the form of moving pictures, steropticon slides, and exhibits. Nearly a million are reached by debates and discussions, and 300,000 persons by extension institutes and by conferences. From their very nature some of these extension education agencies must remain independent and go their own way undirected by any organized public agencies, but many of them are capable of being brought together for cooperation and for direction in a way which will make them much more effective than they can ever be while working apart and undirected.

To effect such cooperation and to give such direction constituted the purpose of the Educational Extension Division of this bureau, which was created in December, 1918, and maintained until the end of the fiscal year with an allotment of $50,000 from the President's fund for the National Security and Defense. For many years the American Library Association, the National University Extension Association, and societies interested in visual instruction, organizations interested in the promotion of reading and discussion among the people, those interested in community organization, and many other individuals and societies had been asking for such help from the bureau, which could be given best by such a division. After the United States entered the war these requests became more insistent, particularly the requests from the National University Extension Association, which several times sent committees to interview the Commissioner of Education and, finally, the Secretary of the Interior. It was in response to the requests of this association that the division was finally established.

The main purposes of this division have been:

1. To serve as a clearing house of information on methods of and materials for educational extension and to advise educational extension agencies.

2. To salvage for general and permanent use educational extension methods and materials created and collected by the Government in the war emergency.

For the purpose of these functions, the division was organized in four sections corresponding to the main avenues of extension service already established in many of the States: (1) Extension teacher; (2) public discussion and library service; (3) community center service; (4) visual instruction.

During the six months of its existence the division distributed to the States some of the many Federal documents, war education courses, and motion-picture films available in the several departments in Washington, and gave valuable aid to State universities by distributing data on the methods and activities of the different bureaus. The division has sent out statistical data, budget for extension divi-

sions, digest of educational bills; made available selected "package library" for the open-minded, impartial study of such questions as Government ownership and operation of railroads, Government control of prices, and reconstruction work. It also promoted Americanization by gathering the experience of individuals and societies who had been working among foreigners, and making that experience available to universities and departments of education in summaries.

Through the visual instruction section of the division, 25,000 stereopticon slides and more than 6,000,000 feet of moving-picture films have been collected, and approximately 4,000,000 feet of films have been edited and distributed to the extension divisions of universities and colleges and State departments of education, and are now in use by them. Among the reels sent out are camouflage in modern welfare; the work of the American engineers; lumbering in France; military communication; sports and entertainments for soldiers; transportation of men and supplies; the care of the wounded; modern ordnance; chemical warfare; feeding the Army; air service; keeping the Army well; road building; mammoth copper mines; come clean, a dental hygiene film; making the desert bloom; communications on the battle front; the way out and holding on, two films on the rehabilitation of crippled soldiers; treatment of war wounds; work of the United States Coast Guard. Most of these films were produced by the Army War College, the Surgeon General's Office, the Ordnance Bureau, and other bureaus of the War Department, the Committee on Public Information, and other governmental agencies. Arrangements have been made with the National Automobile Chamber of Commerce, by which the bureau will have its assistance in producing for distribution films illustrating the value of good roads and methods of road building. The value of this service is indicated by the fact that reports made to the bureau show that 3,000 schoolhouses have projecting lanterns.

For the use of the colleges and universities in 33 States maintaining an information and library service, this division served as a clearing house and sent out nearly 15,000 pieces of material on current topics to be included in package libraries to be lent to clubs, societies, and individuals; publications of the United States Government were brought to the attention of extension workers; comprehensive bulletins in mimeographed form were sent out on the following subjects: Adult education; a survey of public-discussion work in the States; exhibit of United States publications; budget for public discussion, bureaus, package libraries, and club service.

Directory service was maintained for 18,000 public libraries through which these libraries were constantly informed about valuable publications issued by the ministerial departments of the Government. In Library Service, a publication issued at irregular

intervals, attractive and intelligible accounts were given of the work of the following Government departments: Agriculture, Commerce, Labor, Treasury, and Interior.

Particular attention was given to the distribution of material valuable in such Americanization work as can be done best by university extension agencies, and about 11,000 pieces of Americanization literature, concrete and of specific value in planning courses in teaching immigrants, were sent to extension agencies interested in this work. Among these were valuable publications on the teaching of English prepared by the Massachusetts Extension Department; publications of the California State Commission on Immigration and Housing; publications of the Extension Division of Iowa for work among young people in school and college, a publication of Reed College, showing results of surveys of American cities in regard to illiteracy, foreign-born population, and other significant items.

Near the close of the fiscal year, contracts were made for the preparation of manuscripts on the following subjects relating to educational extension work as promoted and surveyed by this division of the bureau: Class extension work in university extension; organization and financing of correspondence departments in universities and colleges of the United States; correspondence study work in universities and colleges of the United States; public discussion and information service through university extension; university extension in the United States, its history, progress, theory, and practice; the use of Government resources to libraries; the visual method in group teaching and promotion; visual instruction in the United States; distribution and exhibition of materials of visual instruction; the application of commercial publicity and advertising methods to the work of university extension. Most of these manuscripts have been delivered.

THE DIVISION OF AMERICANIZATION.

The cooperative agreement between the Secretary of the Interior and the National Americanization committee of New York, made May 2, 1918, for the purpose of enlarging as a war measure, the work which this bureau had been carrying on since April, 1914, with the help of that committee was continued until March 4, 1919, on a budget of approximately $100,000 a year, and with a corps of 36 specialists, assistants, and clerks. Among the immediate objects of this work, as set forth in the Statement of the Commissioner of Education to the Secretary of the Interior for the year 1918, were the following:

1. To give the immigrant better opportunities and facilities to learn of America and to understand his duties to America.

2. To unite in service for America the different factions among the several racial groups and to minimize in each race the antagonism due to old-country conditions.

3. To cement the friendships and discourage the enmities existing among races and to bring them together for America.

4. To bring native and foreign-born Americans together in more intimate and friendly relations.

5. To give native-born Americans a better understanding of foreign-born Americans.

6. To develop among employers a more kindly and patriotic feeling toward foreign-born workmen.

7. To encourage the foreign-born Americans to assist in the work of Americanization and to develop a more patriotic feeling toward the work in which they are engaged.

8. To develop the school as the center for Americanization work for all alike.

For the maintenance of this work, two sections of this division were maintained until March 4, one in Washington and another in New York with offices in the Chemical Building at 29 West Thirty-ninth Street. The section in Washington was charged particularly with the promotion of education of foreign-born residents in this country through classes in schools and industrial plants and in connection with social organizations—a continuation of the work which the bureau had been doing for several years under the title of "Immigrant education."

The personnel of the New York office included editors, research specialists, translators, racial advisers, and clerks. The racial advisers were men of such ability and character and such general knowledge both of America and of their own people in this country as to gain for them the confidence of a large number of their fellows. Such advisers were appointed for the Armenian, Assyrian, Greek, Italian, Jewish, Russian, Polish, French, and English racial groups. Through these racial advisers the commissioner was constantly advised as to the general conditions and needs of persons of these racial groups in this country, of their attiutde toward the work of Americanization, the ideals and policies of the Government, and of the best means of reaching them with instruction. They also serve as messengers for the bureau, holding conferences of their people, speaking in their lodges and public gatherings, translating material for publication in their foreign-language papers, etc. The work of this section of this division was that of getting the various racial groups in the United States intelligently united behind the American war policies and to induce them to become active participants in the war program, preparing them for a fundamental understanding of citizenship, familiarizing them with the Government's war activities, provisions, and needs through war-information centers, industrial plants, racial societies, and the foreign-language press,

bringing together foreign and native born residents and employers and employees through the American and foreign press and securing active cooperation of other Government agencies through which foreign-born residents would be reached.

General conferences of from 20 to 60 representative men of several racial groups were held by the commissioner in New York, and one conference of representatives of more than 30 racial groups was held. Many similar conferences were held by the director of the New York office. More than 100 men of different races were organized into small permanent conference groups, each of which held frequent meetings at the New York office. These men were valuable in helping to work out a sound policy and program of racial relations and in carrying our message to their own people through conference lectures, articles in the foreign-language press, and by participating in local activities.

Many articles on Americanization were prepared for publication in the English and foreign language papers and in the house organs of nearly 500 industrial plants. These articles were accepted by papers having a total circulation of more than 5,000,000. The policy of appointing Americanization committees composed of both foreign and native born citizens in industrial plants already begun was continued until more than 800 such committees had been appointed and were actively at work. Many of these rendered a very valuable service. The division cooperated constantly with the National Council of Defense, the Liberty loan division of the Treasury, the Ordnance Bureau, and the Provost Marshal General's Office of the War Department, and with many other governmental agencies. In midsummer of 1918 the Americanization Bulletin, the title of which was later changed to "Americanization," was begun and was continued through the fiscal year.

For the fuller support of the Americanization work of the bureau, $18,000 was set aside on January 1, 1919, for the continuation of the publication of National School Service and general educational extension work. With this fund the work of the bureau was augmented until March 4, and then continued on a much smaller scale until the end of the fiscal year. When this part of the allotment from the President's fund was set aside for this purpose, a director of Americanization work was appointed and five expert community organizations were placed in the field as follows:

At Albany, N. Y., in charge of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, and New York.

At Toledo, Ohio, in charge of Michigan, Ohio, Indiana, and West Virginia.

At Chicago, Ill., in charge of Minnesota, Wisconsin, Illinois, Iowa, and Missouri.

At Philadelphia, Pa., in charge of New Jersey, Pennsylvania, Maryland, Delaware, and the District of Columbia.

In all of the above States, with the exception of Maine and Minnesota, the regional directors have made their contact with State officials, heads of State organizations, men and women of large influence, and others. In every State they have urged legislative action and have been most helpful in a number of instances in having sane legislation provided. They have appeared before legislative committees, large State gatherings, and other meetings. They have presented the problem to the governors of the various States and secured their sympathetic support for effective legislation.

Nine of the above States have taken some definite legislative action in Americanization, either creating an official charged with the task definitely or placing the work in the hands of some commissioner or bureau. In view of the fact that education is a fundamental part of Americanization, it has been recommended that the work within the States be placed in a branch of the State department of public instruction, but that there be recognition of the fact that Americanization is broader than mere education through books.

In two States the Department of the Interior has named State committees composed of two representatives of State bodies whose duties are, first, to try to secure State legislative action, and, second, to see that the necessary work of Americanization in such States does not go by default pending legislation. In four other States tentative lists have been compiled for the appointment of similar committees.

In all the States, the regional directors aided eliminating duplication and in many cases friction existing among the agencies at work. They have brought about a better understanding of the problem. They have made the acquaintance of the key men and women of the State so that in every State the machinery of Americanization could be quickly set into motion under the common and definite program.

Although an effort has been made to avoid entering into particular community projects until the States were first properly organized, yet the division has been called into a number of large community undertakings. Some communities, like Toledo for instance, are organizing the agencies of their city most effectively for a real program of work. Funds have been provided from various sources, classes are organized in the schools and in the factories and a program put under way which harmonizes entirely with the plans of the division. In such cities the regional directors have been very helpful and in some instances have, it is thought, saved the cities from mistakes which might have been disastrous to the work.

In the Washington office since January 1, a large amount of the material on Americanization which had accumulated in the bureau has been filed, classified, and digested. Mimeographed brochures

covering various phases of Americanization, bibliographies, statistics, etc., have been prepared and distributed. The publication of "Americanization" has been continued.

A national conference on Americanization was held in Washington in the auditorium of the Department of the Interior, May 12–15, and was attended by more than 400 of the leading experienced workers of the country. For the first time the social, the educational, the industrial, and the racial workers met together to consider their common problem. Out of the proceedings of this conference, which were published as a bulletin of the bureau and widely distributed, the director of the division is preparing a textbook on Community Work in Americanization.

As a result of the work of this division of the bureau, the country has obtained a broader and clearer conception of what Americanization means, and its importance has been greatly emphasized. Several States have enacted laws and made appropriations for teaching English and other subjects to foreign-born residents in the public schools and elsewhere. Numerous societies have been organized for the promotion of Americanization work, and many more organized for other purposes have adopted some form of Americanization work as a part of their program. In the 20 Northeastern States, in which are found most of the foreign-born population of the country, a definite and practical program could be quickly initiated and the great State agencies easily mobilized to carry it into effect if sufficient funds were at the command of the bureau for that purpose. Left entirely to their own resources, Americanization work by the States and communities will, no doubt, continue in the future as in the past to be sporadic and largely ineffective. The time has come when his work should be undertaken by the Federal Government and the States on a scale comparable to the magnitude of the task and the issues at stake. This could be done if the bill now pending in Congress is enacted into law. This bill would provide an annual appropriation of $14,250,000 a year for a period of seven years for the teaching of foreign-born residents of the United States to speak, read, and write the English language or give them instruction in American geography, history, institutions, and life and ideals, and for the teaching of adult illiterates and near illiterates to read and write and give them instruction in beginnings of arithmetic and other subjects necessary for intelligent life and work.

Near the end of the fiscal year, contracts were made for studies and reports on the following subjects: Methods of teaching illiterates; State Americanization; methods of teaching English to the foreign born; training teachers for the foreign born; progress of education

of persons of foreign birth. Community Americanization; progress of education of persons of foreign birth.

Several of these have already been delivered and recommended for publication as bulletins of the bureau; other are to be so recommended as they are received and approved.

THE DIVISION OF CIVIC EDUCATION.

A remarkable stimulation of interest in civic education resulted from the war, and it is perhaps worthy of note that the bulletins relating to civic education published by the Bureau of Education prior to this year have been widely influential in determining the character of instruction introduced into the public schools for purposes of civic training.

The demand for these and other materials, and for assistance in developing courses of civic training, has greatly increased not only from public schools, but also from other agencies interested in extending civic education to various groups of the people.

The pressure of war activities diverted the division during the past year from the logical development of work begun prior to the war and interfered with the preparation and publication of materials for which there is a great demand, now that the war is over. Much time was devoted to the preparation of materials bearing directly upon the war and upon governmental activities relating to the war, these materials being of more or less transient usefulness. Nevertheless, material has been assembled which it is believed will be serviceable in the extension of civic training both in the schools and among citizens generally.

The specialist in civic education cooperated with the overseas educational commission of the Young Men's Christian Association and prepared a pamphlet of about 100 pages entitled "Team Work Through Government," constituting an elementary course in citizenship for our soldiers overseas. Of this 25,000 copies were taken.

The specialist in civic education participated in the survey of the schools of Memphis, Tenn., and prepared a report on the conditions and need of civic education in that city. This will be published as a part of the report of this survey.

The demand for this and other material and for assistance in developing courses of civic training has greatly increased not only from public schools, but also from other agencies interested in extending civic education to various groups of the people.

THE DIVISION OF COMMUNITY ORGANIZATION.

The Bureau of Education has for several years been promoting community organization or community center work, for the purpose of organizing school districts as communities and using school-

houses as centers for meetings and for cooperative activities. The slogan has been "Every community a little democracy, with the schoolhouse as its capitol." The bureau has avoided and on occasion opposed efforts to bring together other organizations or classes in occupational groups to serve as community organizations. It has also held that schoolhouses and, when desirable, other public buildings should be available for use by the people of the organized community as a right and not as a privilege by permission; that tax moneys should be used in the development and maintenance of community organizations and centers, and that community centers should be administered through responsible public officials.

In this work of the bureau several bulletins have been issued, a large and extensive correspondence has been conducted, and many addresses have been made to local, State, and National meetings and in educational institutions. The interest of city, county, and State school officials has been enlisted. Drafts of bills for State legislation have been prepared. Several State and National conferences have been held.

During the fiscal year for which this statement is made, a conference of Federal and volunteer agencies of community organizations was held in connection with the meeting of the National Education Association at Pittsburgh. Two bulletins were prepared and printed: "The Discovery of America" and "Community Buildings as Soldiers' Monuments." The first was prepared for the use of the Treasury in the fourth Liberty loan campaign, and 300,000 copies were distributed. Of the second, 20,000 copies were distributed. A curriculum was prepared for a new department of social ethics and community organization in universities, colleges, and normal schools. Such a department has been established in the North Carolina State College for Women, and one of the bureau's specialists has conferred with the authorities of Columbia University, Harvard University, Simmons College, and George Peabody College for Teachers, about the establishment of such a department in these institutions. Courses of lectures on community organization were given during the year in 12 universities, colleges, and normal schools, and more than 50 communities were met at local, State, and National functions. Relations have been established with 42 States for the promotion of community organization, and outline plans for organization and suggested programs for meetings have been distributed.

A new development of the community organization during the year is its use for cooperative buying and selling, and the use of community centers as points for collecting and distributing parcels. That this may be done effectively and at a great economic ad-

vantage seems now to have been definitely proven by experiments conducted between the community centers in the District of Columbia and other centers near by in Maryland and Pennsylvania. In these experiments the Post Office Department and this bureau are cooperating.

SCHOOL BOARD SERVICE DIVISION.

The results of an inquiry made by the Bureau of Education last October indicated that more than 50,000 schools in the United States were without teachers. It also indicated that more than 120,000 new and wholly untrained teachers had been drawn into the public schools of the country, mostly boys and girls barely ahead of the classes they were expected to teach. This unusual shortage of teachers was caused by the draft of men for the Army, and of both men and women for industries connected with the war. Also by the attraction of higher pay in all kinds of industries and commercial enployments.

Calls from all parts of the country came to the Bureau of Education to help relieve this condition. To meet this most critical emergency in our schools the President of the United States, under date of September 30, 1918, allotted from the appropriation for national security and defense the sum of $25,000 to the Secretary of the Interior, who authorized the Commissioner of Education to establish the school board service section in the Bureau of Education. The division continued its work until July 1, 1919. During the brief term of its existence it conducted a nation-wide publicity campaign in newspapers and magazines to mobilize the latent teaching forces of the country, secured a registration of about 20,000 persons, and responded to 15,000 calls for teachers with as many nominations.

In preparation for more effective service it made a partial canvass of colleges, normal schools, and the better class of high schools of the country, in order to develop a national directory of competent teachers whose names and credentials might be referred to school boards or heads of institutions reporting vacancies.

As a result of this campaign, it has in its files the records of 14,000 active and 7,000 passive registrants. By the designations "active" and "passive," respectively, is meant teachers who are desirous of changing their locations, and those who care only to have their names in the directory.

Classifying these registrants in terms of academic training, the directory includes nearly 16,000 college or university graduates, 4,200 special teachers of manual training, physical training, home economics, etc., who do not hold college degrees but diplomas of technical schools, and 1,050 teachers of rural and graded schools whose training is of less degree.

Cards abstracting the record of each of the 14,000 active registrants were made and to each such registrant a folder is assigned in which his record and all correspondence pertaining to him have been placed. Cards and folders are arranged in alphabetical sequence.

The active cooperation of school officials throughout the country has been secured, and their cordial appreciation is evidenced in typical letters in the files. The division has responded to calls for teachers in all grades of schools—elementary, high, normal, technical, college, university—and in every subject of the various curricula.

THE DIVISION OF RACIAL GROUPS.

During the year the work of the division has centered around activities connected with the war and the educational problems growing out of the war. The migration of Negroes from the South to northern industrial centers has produced an aroused interest in the needs of the Negro and his training for citizenship and for the economic responsibilities which are more and more coming to him. This interest has been shown by increased appropriations in many sections of the South for the education of Negro children, by conferences which have been called to consider these matters, and by an increased correspondence with the bureau concerning ways and means of meeting the enlarged demands.

During the war three men from this division were engaged in war activities. One man became an educational adviser to the Young Men's Christian Association in France, in its dealings with the Negro soldier. Another was a supervisor under the committee on education and special training of the War Department. A third was used in the personnel section of the War Department to assist in the placing of Negro soldiers in the service of supplies.

The field work of the division has consisted in preparing the report on Negro education for the Alabama survey, and in making investigations in a number of schools in South Carolina, Georgia, and Florida. These investigations are recorded and are of use in answering the many and varied queries addressed to the Bureau of Education by organizations and individuals interested in the education and development of the Negro population of the country.

THE DIVISION OF HOME EDUCATION.

During the year two new reading courses, No. 7, Thirty World Heroes, and No. 9, Thirty American Heroes, were published, and a series of "After the War Reading Courses" and reading courses on such vocational subjects as shipbuilding, machine-shop work, iron and steel, seamanship, and agriculture, have been begun.

Of the standard reading courses, nearly 230,000 copies have been distributed through high schools, libraries, and other agencies, and 160,000 copies of six "After War Reading Courses" for soldiers were distributed to camps and cantonments in the United States and overseas.

More than 10,000 readers are enrolled in the National Reading Circle. These are mostly in rural communities and villages and small towns, but are not confined to these. One of the most successful reading circles is one of 150 members in Glendale, Calif. In Cleveland and Pittsburgh there are reading circles having a membership of more than 150 and in the District of Columbia there is a circle of 90.

The purpose of the work of this division is fourfold:

1. To help parents in the care and training of their little children before the children become of school age. To this end the division has prepared a specially designed reading course for parents to give them knowledge of the duties of parenthood. It has also sent out public health bulletins on the diet and the care of babies and similar publications issued by the National Congress of Mothers.

2. To help parents further their own education. For this purpose the division has continued to issue a series of 10 reading courses designed largely for general information and cultural development. The division requires written summaries of the books and answers to test questions given for the purpose of determining how carefully the books have been read and how well they have been understood. When a course has been properly completed a certificate signed by the Commissioner of Education is issued to the reader.

3. To promote the education of boys and girls who have left school and of older persons. Two courses have been especially designed, a miscellaneous course for girls and a like course for boys, to be read by young people who have left school at an early age, but are still at home.

4. To promote a closer cooperation of home and school by the organization of parent-teacher associations. At the inception of this division the names were obtained of 60,000 women living near to country and village schools who would be willing to assist in bringing about a closer relation between home and school. These women have distributed material regarding the organization of parent-teacher associations, have assisted in placing information on the care of babies in the hands of mothers of young children, and have helped in maintaining the interest of parents in the schools.

During the war the division extended its work to include several reading courses for soldiers in the camps. Since demobilization these courses have been continued for discharged soldiers in their homes.

ALASKA DIVISION.

During the year the field force of the Bureau of Education in Alaska consisted of 3 superintendents, 3 acting superintendents, 121 teachers, 8 physicians, and 11 nurses. Sixty-eight schools were maintained, with an enrollment of 3,700.

In October, 1918, following the line of steamship transportation from Seattle, influenza broke out in the coast towns of Alaska and rapidly spread to the interior settlements. Furnishing relief to the native races of Alaska is a duty of the Bureau of Education, but, in the great emergency created by the epidemic, the Bureau of Education could not, by itself, effectively cope with the situation. Gov. Riggs, therefore, as executive head of the Territory, accepted the responsibility of directing the fight against the disease, and took immediate, energetic, and effective action to check its ravages among the native races of Alaska, as well as among the white people.

The Surgeon General of the Public Health Service authorized Gov. Riggs to employ physicians and nurses and to purchase medicines. As a sufficient number of doctors and nurses could not be had in Alaska, 19 physicians and 3 nurses were secured in the State of Washington and sent to southern Alaska on the naval collier *Brutus*. All of the Bureau of Education's physicians, nurses, superintendents, and teachers were placed at the governor's disposal and rendered zealous service in fighting the epidemic in the native villages. White people throughout the Territory cooperated heartily. The assistance of the Red Cross was also secured.

Up to January 31, 1919, the epidemic had resulted in the death of more than 1,600 natives. At least 150 orphans were cared for and fed. About 90 per cent of the fatalities and of the indigency was among the native population.

The epidemic was especially severe in the Nome and St. Michael regions, where it resulted in the death of at least 850 natives, more than 150 children being left orphans. It will, however, be possible to find homes for these orphans among the Eskimos in the villages on the coast north of Bering Strait.

Among the victims of the epidemic were Mr. Walter C. Shields, who for many years had been superintendent of the work of the Bureau of Education in the northwestern district; Dr. Frank W. Lamb, physician in charge of the Bureau of Education's hospital at Akiak; and Mrs. Harriet T. Hansome, assistant teacher at Hydaburg.

In May influenza made its appearance among the Eskimos in the Bristol Bay region and among the Aleuts at Unalaska. As in the previous epidemic, vigorous measures were taken to combat the

disease. The Navy Department sent the *Unalga*, the *Bear*, the *Vicksburg*, and the *Marblehead* with physicians and nurses to the stricken districts. In the village of Unalaska the epidemic caused 45 deaths and in the Bristol Bay region 440 deaths.

An orphanage is being erected at Kanakanak, in which the bureau will care for about 150 destitute children who were made orphans by the epidemic.

In 1911 the bureau entered upon the policy of encouraging the establishment in native villages of cooperative enterprises, financed by native capital and conducted by the natives themselves, under the supervision of the teacher of the local United States public school. Such enterprises are now in successful operation in nine villages in widely separated regions. Each enterprise is bringing prosperity to the village in which it is located.

Conspicuous among these undertakings is the Metlakatla Commercial Co., on Annette Island, in southeastern Alaska, which was organized in 1916 with a capital of $2,295, and 30 shareholders. The auditing of the affairs of the company in January, 1919, showed a capital of $21,140 at that date, and a net profit of $13,721. The number of stockholders had increased to 156. The returns to the natives of Metlakatla from the Annette Island Packing Co., having fish-trapping privileges within the reserved waters adjacent to Annette Island and permission to erect and operate a cannery on Annette Island, amounted during the season of 1918 to $70,252.55 for fish royalties, trap fees, labor, and lumber purchased from the local sawmill.

The successful operation of the lease granted to the Annette Island Packing Co. at Metlakatla led to the adoption of similar policy at Tyonek, in southwestern Alaska. For several years canneries and packing companies have provided the natives of Tyonek with fishing equipment and have purchased the fish caught. Under this arrangement the Tyonek natives never realized more than $4,000 in a season. Under a lease entered into during January, 1919, with a Seattle capitalist granting him the privilege of operating a saltery and fish trap within the Tyonek reservation, the annual income to the Tyonek natives from royalties and wages paid will be about $10,000.

Congress appropriated $75,000 for the support of the medical work of the bureau among the natives of Alaska during the fiscal year 1918–19. Eight physicians and 11 nurses were employed; hospitals were maintained by the bureau at Juneau, Nulato, Kanakanak, Akiak, and Kotzebue; the hospital at Haines was operated in cooperation with the Woman's Board of Home Missions of the Presbyterian Church. Materials for use in erecting a hospital building at Noorvik, in Arctic Alaska, were shipped from Seattle in June, 1919. As heretofore, all teachers in settlements remote from a

hospital, physician, or nurse were supplied with medicines for use in relieving less serious illness.

The policy of receiving native girls for theoretical and practical training as nurses, inaugurated in 1918, has been successfully pursued at the hospital in Juneau.

Reports from the reindeer stations for the past year have not yet been received. Assuming that there has been the usual net increase of 20 per cent in the number of reindeer during the year, there should be approximately 145,000 reindeer in the herds in Alaska, June 30, 1919.

The magnitude and value of the reindeer enterprise have rendered necessary the employment of an expert in animal industry, who has proceeded to northwestern Alaska, where he will carefully study the prevention and treatment of diseases among the reindeer, as well as scientific breeding, herding, butchering, and marketing.

On account of the vast extent of the Territory of Alaska, with its villages scattered at intervals along thousands of miles of coast line and on its great rivers, the taking of the census of Alaska is an undertaking of great difficulty. Through its district superintendents, physicians, and teachers, located in all parts of the Territory, with accurate knowledge of their respective districts, and with facilities for reaching the remote settlements, the Bureau of Education will cooperate with the Bureau of the Census in taking the 1920 census of Alaska.

THE DIVISION OF RURAL SCHOOLS.

In addition to the routine work of correspondence, keeping in touch with the progress of rural education throughout the country, noting the important legislation affecting rural schools, studying noteworthy departures in rural-school practice, including changes in courses of study and methods in organization and teaching, giving information and advice to school officers and teachers in response to thousands of inquiries by letter and personal visitation, attending and addressing teachers' institutes and local and State and national meetings of associations of teachers, school officers, and citizens interested in rural schools and the means of their improvement, the division of rural schools and its members accomplished the following work:

The division completed for publication the portions of the report of the educational survey of the State of South Dakota pertaining to the general school system and the rural schools and normal schools. This survey was made under the direction of the chief of this division in the winter and spring of 1918 at the request of the State Survey Commission created by act of the legislature.

At the request of the board of trustees and the superintendent of schools of La Crosse County and of the State superintendent of schools of Wisconsin, a study was made of the work of the county agricultural school of La Crosse County, Wis., and of its place in the county system of schools, and a report with recommendations submitted.

Studies of rural education in Nebraska were completed and a report prepared for publication as a bulletin of the Bureau of Education. These studies were made in cooperation with the school of education of the University of Nebraska.

A survey of rural schools of Walker County, Tex., and a report with recommendations were prepared for publication as a bulletin of the bureau.

A report of the survey of the rural schools of Falls County, Tex., made in the fiscal year ended June 30, 1918, was completed for publication as a bulletin of the bureau.

At the request of the survey committee of the State of Alabama, created by act of the legislature of the State during the first half of its quadrennial session, the Bureau of Education undertook a comprehensive survey of the State system of education and of all of its parts, including the higher institutions of learning, schools for the blind and deaf, and other exceptional children. The whole of the survey was made under the direction of the chief of the rural school division of the bureau, and other members of this division assisted in the survey of the rural schools, including the county high schools, normal schools, and district agricultural schools. The report of the survey was prepared and published as a bulletin of the bureau, and a great majority of its recommendations were embodied in a new and comprehensive school code during the second half of the session of the legislature. The entire report, with all of its recommendations, received the hearty approval of the State survey commission, and it is believed that further recommendations not embodied in the school code will be adopted as soon as necessary amendments to the constitution of the State can be had and when further developments of the system make their adoption advisable.

In surveys of this kind, it is not the policy of this bureau to make only those recommendations that can be put into operation at once, but rather to make such constructive recommendations as may serve for the improvement of the schools and the school system for 5 or 10 or more years.

A detailed study of the possibilities of consolidating seven one-room one-teacher schools of Mount Joy Township, Adams County, Pa., into one school, and of the advantages that might be expected to accrue from such consolidation, was made at the request of the superintendent of schools of Adams County and of the State superin-

tendent of education. The results of this study will be published as a bulletin of the Bureau of Education. One of the special reasons for this survey at this time was the desire of the people of this township to use the consolidated school as a community center, both for the ordinary purposes of such a center and also for cooperative buying and selling and exchange of products with community organizations in the city of Washington. The Post Office Department assisted in establishing the cooperative exchange.

A thorough and comprehensive study of rural school consolidation in the country at large and in typical counties in which consolidation has made most progress has been made. This study includes readjustments in courses of study and improvement in methods and results made possible by consolidation. It is the most comprehensive and full study of the kind yet made. The results of the study are being prepared and are now almost ready for publication in three separate bulletins of the Bureau of Education.

Last fall a Nation-wide inquiry was made to ascertain the extent of the shortage of teachers. Results of the inquiry showed a shortage of rural teachers in almost every section of every State. It is estimated there was a total shortage of approximately 50,000 teachers, and there was an unusual number of young, inexperienced teachers, and a consequent lowering of standards. As a result of this inquiry the Commissioner of Education, assisted by the Division of Rural Schools, entered upon a campaign for recruiting all rural teachers from the ranks of married women and others who had previously had successful experience as teachers and whose circumstances were such as to permit them to reenter the schools temporarily at least for this important, patriotic service. Forseeing the continuance of this shortage of teachers, normal schools and colleges and universities, having departments of education connected with them, were urged to offer special short courses for these persons, and otherwise to increase their efforts for the preparation of teachers; and young men and women having suitable preparation were urged to enter these schools and prepare themselves for teaching. As a further result of the findings of this inquiry the President allotted to the Secretary of the Interior $25,000 out of the appropriation for the National Security and Defense to establish and maintain through the remainder of the fiscal year the school board service division of the bureau referred to elsewhere in this statement.

Since the beginning of the reported increase in prices and the cost of living, this bureau has been urging boards of education, legislatures, city councils, and other legislative bodies to increase salaries of teachers, and to make the necessary provisions therefor through increased appropriations and tax levies, to the end not only that the pay of teachers might keep pace with the rise in prices and in pay for

other forms of service as was necessary to prevent lowering of standards in the qualifications of teachers and the work of the schools through the loss of the more competent teachers to other employment, but also that, if possible, these standards might be raised to meet the new and urgent demands made upon the schools. Reports made to this bureau for the year ended June 30, 1918, show an average increase of about 17 per cent in the total expenditures for the pay of teachers' salaries for the annual period 1917 and 1918, but the separate inquiry made to the rural school division as to the salaries of rural school teachers indicated that the increase in pay of these teachers has not been so large as that of the average, which has been raised chiefly by the increase in the pay of city school teachers. On the basis of the revelations of this inquiry, State legislatures, and county, township, and district tax levying bodies, on whose action any increase in funds available for paying teachers in rural schools must depend, have been urged to make relatively large increases in appropriations and tax levies for this purpose. Plainly little or nothing is to be gained by increasing the monthly rate of the pay of teachers at the expense of shortening the school term. It is the total amount of pay for the school year rather than the wages per month that counts.

In view of the fact that the legislatures of more than four-fifths of the States were to meet in the calendar year 1919, this division of the bureau prepared for the use of the State departments of education and members of such legislatures a legislative manual, in which were summarized in forms easily read and understood all of the most important educational statistics, showing in a comparative way the conditions and needs of the rural schools in the United States. This manual was published as Bureau of Education Bulletin, 1919, No. 4, and was distributed to the persons for whose use it was designed.

A comprehensive study of the certification of teachers in the several States is now almost finished and will soon be published as a bulletin of the bureau.

An investigation has been in progress in regard to the standardization of rural schools in the several States. The purpose of the investigation is to bring together in compact form the standards which have been adopted for school buildings, school equipment, school sanitation, courses of study, etc. The results of the investigation will be published as a bulletin of the bureau.

A comprehensive study of free public libraries as they affect the rural population of the country, of the need of county libraries and of the policy of counties to maintain them, has been completed and will be published as a bulletin of the Bureau of Education. This study shows that 2,200 counties, or about two-thirds of all of the counties of the United States, have no public libraries or none con-

taining as many as 10,000 volumes; that more than half the people of the United States have no access to any adequate collection of books; and that practically all of these counties might, at a cost that would not involve excessive taxation, maintain good libraries at the county seats or elsewhere, with branch libraries in the most important towns and villages, making use of the schools as distributing centers. In this way the general educational facilities of these counties might be increased in large proportion. The study also shows how, through cooperation of cities and counties, the city libraries might easily be made available for the free use of the rural population of the counties in which they are located.

Believing the schools in the villages and small towns to be capable of assuming a much more important place among the educational agencies of the country than they now have, and conscious of the comparative neglect of these schools in all these studies of education and in all plans for school improvement, much attention has been given to this subject. In the past year and a half two interesing and valuable national conferences on village schools have been held, one in connection with the meeting of the National Education Association at Pittsburgh in July, 1918, and one in connection with the meeting of the Department of Superintendence of the National Education Association at Chicago, in February, 1919. Two conferences on the special needs of schools in mining villages and small mining towns have been held, and one member of this division has devoted several weeks to a first-hand study of conditions in mining villages in Pennsylvania and West Virginia coal fields. Another member of this division and the specialist in educational systems attached to the Division of City School Administration have given special attention to the condition and needs of southern cotton mill villages, with a view to making recommendations for the improvement of their schools.

A bulletin has been prepared showing the present practice in village and small town school organization and showing the opportunities for their improvement and particularly for their use as consolidation centers. The studies already made indicate that this is a very useful field, and this work will be continued and enlarged. There are in the United States more than 10,000 villages and towns having a population under 2,500 and a total population of more than 8,000,000.

With the assistance of other members of this division, the school extension agent has held three important national and sectional conferences on rural education, one at Stevens Point, Wis., December 22–25, 1918; one at Daytona, Fla., February 1–4, 1919; and one at Oklahoma City, April 30–May 3, 1919. Plans were made for a conference at Sioux Falls, S. Dak., in the early spring, but the conference was postponed on acount of the epidemic of influenza, in the North

Central States at that time, and will be held in October, 1919. These conferences were largely attended by educators, governors of States, and other public officials, and laymen interested in the cause of rural education. The Oklahoma City conference was the twelfth of these conferences on rural education held by the Bureau of Education, the first having been held in Chicago in 1914. They have proven very valuable in stimulating intelligent interest in rural-school improvement and in getting before the people for consideration and discussion the program of this bureau for rural-school improvement. This program, now generally accepted as a working basis, includes the following 12 recommendations:

1. An academic term of not less than 160 days in every rural community.
2. A sufficient number of teachers adequately prepared for their work.
3. Consolidation of rural schools where practicable.
4. Teacher's home and demonstration farm of five or more acres as a part of the school property.
5. An all-year school session adapted to local conditions.
6. A country library with branch libraries at the centers of population, the public schools to be used as distributing centers.
7. Community organization with the school as the intellectual, industrial, and social center.
8. A high-school education for all country boys and girls, without severing home ties in obtaining that education.
9. Such readjustment and reformation of the course of study in elementary and secondary rural school as will adapt them to the needs of rural life.
10. Federal aid in public education.
11. The elimination of illiteracy.
12. Americanization of all citizens through a better civic and patriotic instruction.

The rural school extension agent and other members of the division cooperated with the State superintendents of schools of Texas in planning and holding a rural school conference in that State in June, 1919, in connection with summer schools at four normal schools, the State university, and the State college of agriculture.

The work of the rural teachers reading circle has been continued under the direction of this division. The number of readers is increasing. Its purpose is to stimulate the best and most progressive rural teachers, superintendents, and supervisors of schools to read systematically a good number of the stimulating and instructive books on the fundamental purposes and practices of education, on rural economics and rural life, and on the organization and conduct of rural schools.

The educational section of the Department of the Interior exposition in the spring of 1919 was prepared under the direction of this division of the bureau. Among other items of this display were a modern rural school, a modern home garden, and charts showing the work of the various divisions of the bureau, and displays from the

Americanization division and the educational extension division of the bureau, including the visual instruction division.

DIVISION OF CITY SCHOOL ADMINISTRATION.

In addition to the routine work of correspondence, holding conference, and the giving of information and advice to school officers and teachers, the Division of City School Administration, to which are attached the kindergarten specialists, assistants, and collaborators, reports as follows:

This division completed the report of the survey of the schools of Columbia, S. C, made in the preceding year, and prepared it for publication. The chief of the division directed that part of the survey of the educational system of the State of Alabama relating to the organization, support, equipment, and work of the schools systems of the 46 cities of the State, and prepared the report on this part of the survey.

The chief of the division has immediate direction of the survey of the schools of the city of Memphis, Tenn., made by this bureau last spring. Two other members of the division assisted in the survey, and the division put the several parts of this report into final shape for printing.

The division has conducted a study of the relation of education to industrial and social conditions in the city of Passaic, N. J. The study will be continued and completed within the current year.

The specialist in school systems, attached to this division, has begun a study of the schools at Erlanger, a typical cotton-mill village near Lexington, N. C., and will, under the direction of the Commissioner of Education, assist in reorganizing these schools and in readjusting their courses of study so as to adapt them to the conditions and needs of the people. As an introduction to the study of local economics and as a coordinating subject in these schools, there has been collected and prepared an extensive course on the cultivation, manufacture, and uses of cotton. The schools of this mill town have been taken as typical of the schools of cotton-mill towns in the South.

The specialist in school systems has also prepared a bulletin on the phonic method of teaching reading.

The division outlined for the superintendent and board of education of Elizabeth City, N. C., a plan for the survey of the schools of that city.

A study has been made of the causes of failure and nonpromotion in the primary grades of the public schools.

Among the important conferences held was a conference of superintendents of schools in cities having large industrial interests, for

the purpose of discussing plans whereby school terms and hours of attendance might be adjusted to the needs of older boys and girls who, under pressure of war needs, were seeking employment in industrial plants.

Kindergartens.—Three studies relating to the kindergarten have been completed and published as bulletins of the bureau: "Kindergarten Supervision in City Schools," "A Survey of Kindergarten Education for the Years 1916 to 1918," and "The Kindergarten Curriculum." Studies now in progress, the results of which will be published by the bureau, are: "Salaries and Hours of Work of Kindergarten Teachers as Compared with Those of the First Grade," "Modifications in Kindergarten Equipment," and "Training Courses in Colleges for Women." In cooperation with the National Kindergarten Union, work is in progress on a curriculum for the first grade, based on the work of the kindergarten. An illustrated bulletin is in preparation for publication, showing the more important activities of children in the kindergartens.

Many thousands of circular letters have been sent to kindergarten teachers, and more than 60,000 leaflets on the kindergarten have been sent to legislators and other persons whom it was desired to interest in kindergarten legislation and other means of promoting the kindergarten. Special assistance has been given to the workers for kindergartens in several States in planning and promoting legislative programs. An intensive campaign for the establishment of kindergartens was conducted in the State of Texas.

A reading course for graduate kindergartners has resulted in an enrollment of readers from every part of the country. A leaflet emphasizing practical ways in which the kindergarten can further the work of Americanization has had wide distribution among school superintendents and kindergarten teachers in cities and towns having large foreign-born population.

The chief of the Division of City School Administration cooperated with the French High Commission in placing French teachers in the schools of the United States. The kindergarten specialist assisted the Ordnance Bureau of the War Department in connection with the equipment of kindergartens in the Government schools at munition plants. All members of the division participated in the war work in many ways.

School administration.—The specialist in school administration has brought up to date the bulletin on laws pertaining to the adoption and supply of textbooks, prepared a brief summary of the history of education in the State of Alabama, which was published as a chapter in the Educational Survey of Alabama, prepared a summary review of educational legislation in the several States in 1917 and 1918, which was published as Bulletin No. 13, 1919, has begun a

similar review of educational legislation for the years 1918 and 1919, has made a study of the educational activities of governmental departments in Washington, and has continued the study already begun on the source of school revenues in the several States. While the legislatures were in session he distributed to State departments of education and legislative committees copies of 24 legislative circulars summarizing pending and completed legislation in the several States.

DIVISION OF HIGHER EDUCATION.

Special war activities.—The normal procedure of the Division of Higher Education was altered by the war. A large part of the time of all members of the division was devoted to various emergency services rendered necessary by the fact that the country was at war. In the following paragraphs the more important of these activities are listed:

The specialist in higher education was a member of the advisory board of the committee on education and special training of the War Department from the time of its organization in February, 1918. Through the summer and autumn of 1918 this committee had charge of the training of mechanics and technicians for the Army in civilian institutions and of the Students' Army Training Corps, established in nearly all the colleges and universities of the country. In the formulation of the plans for all these activities and in the actual administration of them, the division's representative was almost constantly occupied up to December, 1918.

The specialist in higher education served also as a member of the committee on educational relations of the National Research Council and as a member of the advisory committee of the educational bureau of the Young Men's Christian Association. Other members of the division were called upon from time to time to prepare data for the use of these and other emergency bodies.

Publications.—The publications of the division have dealt in large part with the war situation as it affected higher education. Thus the division has prepared a section on higher education for the Report of the Commissioner of Education, a biennial survey of higher education, 1916–1918, and has issued three circulars in the series entitled "The Work of American Colleges and Universities During the War." Of these the most important was Circular No. 12, entitled "Opportunities at College for Returning Soldiers," issued December, 1918, and presenting a summarized statement of the special concessions colleges were willing to make for the benefit of discharged soldiers, sailors, and marines. In addition, it issued to college officers a multigraphed circular entitled "Suggestions to Colleges Concern-

ing the Admission of Returning Soldiers," in which it proposed the relaxation of formal entrance requirements and the substitution of Army intelligence tests in the case of returning soldiers with defective secondary school preparation. The response of the colleges to these suggestions was summarized in another circular sent to demobilization camps. Other publications of the division have been Bulletin, 1918, No. 16, "Facilidades Ofrecidas a los Estados Unidos"; Bulletin, 1918, No. 29, "American Agricultural Colleges"; Bulletin, 1918, No. 30, "Resources and Standards of Colleges of Arts and Sciences"; Bulletin, 1918, No. 51, "Statistics of State Universities and State Colleges"; a section on higher education in Bulletin, 1919, No. 41, entitled "An Educational Study of Alabama." The division has prepared for publication manuscripts of bulletins as follows: "Survey of Higher Educational Institutions of South Dakota." "Requirements for the Bachelor's Degree in the United States," "The Curricula of the Students Army Training Corps," a report of the committee on agricultural education of the National Education Association commission on the reorganization of the secondary school curricula. It has also prepared a circular on "Salaries of College Teachers."

Other activities.—All the members of the division were engaged during the spring of 1919 in work connected with the study of higher institutions in Alabama. The specialist in higher education, the specialist in agricultural education, and the specialist in land-grant college statistics spent several weeks in field work in Alabama in connection with this survey. The report, which was presented to the Alabama Educational Commission by the specialist in higher education on June 9, contained 42 recommendations relating to the administration and support of the higher educational institutions of the State. In recommending an apportionment of the field of professional training between the University of Alabama and Alabama Polytechnic Institute, the report followed the now familiar policy of the bureau of dividing the work of these institutions into major and service lines. Perhaps the most important new recommendation was that providing for the creation of a State council of education, composed of representatives of the administration of the State school system and each of the higher institutions; the future determination by it of State needs in the field of professional training; and the allocation of the different portions of the tasks of professional training among the several higher institutions in harmony with the definition of the spheres of those institutions.

At the request of The Adjutant General of the Army, the division has passed upon the eligibility for accrediting by the United States Military Academy of 473 institutions.

The division has prepared for the Biennial Report of the Commissioner of Education statistics of higher institutions and special statistics of land-grant colleges.

One specialist in higher education represented the division at the following important educational gatherings, at all but two of which he delivered addresses:

The Section on Higher Education of the National Education Association, 1918.
The American Council on Education, 1918.
College Entrance Examination Board, 1918.
National Association of State Universities, 1918.
Association of Colleges and Preparatory Schools of the Middle States and Maryland, 1918.
Association of American Universities, 1918.
Society for the Promotion of Engineering Education, 1918.
National Conference Committee on Standards of Colleges and Secondary Schools, 1919.
The convention of the Association of Collegiate Alumnæ, 1919.
The inauguration of President McConaughy, of Knox College, 1919.

The specialist in agricultural education has represented the division at meetings of the Association of American Agricultural Colleges and Experiment Stations, the National Society for Vocational Education, and conferences on commercial engineering, all in 1919.

The specialist in land-grant college statistics represented the division at the meeting of the Association of American Agricultural Colleges and Experiment Stations and the Department of Superintendence of the National Education Association, both in 1919.

The division organized a series of conferences of specialists in agricultural education for the preparation of courses of study in agriculture. It participated in conferences of the War Department with representatives of colleges and universities in regard to the promotion of military training in higher institutions. It took part in conferences of the Young Men's Christian Association overseas educational commission, and it conducted conferences for Reserve Officers' Training Corps commanders at Camp Lee.

The division was intimately connected with the entertainment of the British educational mission in the autumn of 1918. The specialist in higher education served on the entertainment committee of the American Council on Education, had charge of the arrangements for the entertainment of the mission in Washington, and assisted in organizing the itinerary of the mission through the United States. For the benefit of the mission the division prepared a report on fellowships and scholarships available for British students in American universities.

DIVISION OF EDUCATION IN INDUSTRIES AND HOME MAKING.

Conferences were organized and held in Washington by the bureau for the purpose of considering and making recommendations

regarding: (1) Part-time schools in cities, as a means of reaching boys and girls who left school to work; (2) special provision of evening classes for Government employees in the District of Columbia; (3) effect of the war on high-school enrollment; (4) promotion of cooperation between the public schools, chambers of commerce, and labor unions; (5) preparation of bulletins on conservation of food, for use by teachers of home economics.

Conferences of specialists called by the Commissioner of Education were conducted as follows: (1) Specialists engaged in training teachers of manual training and industrial education in institutions in the Mississippi Valley, held at the State Normal School, Terre Haute, Ind.; (2) specialists in industrial education, held at the Statler Hotel, St. Louis, Mo.; (3) directors of vocational units, Students' Army Training Corps, held at the office of the Board of Education, Chicago, Ill.

The specialist in industrial education has rendered assistance to the committee on education and special training of the War Department in preparing a series of outlines of courses of instruction in mechanical trades for the use of institutions engaged in training soldiers. He has been detailed to field work for an aggregate of 44 days, holding conferences of specialists in industrial education, assisting in the survey of the schools of Memphis, Tenn., representing the bureau at educational conventions, and similar duties. Since March 10 he has been detailed to special duties as assistant to the commissioner.

The specialists in home economics have assisted in the surveys of the public schools of Memphis, Tenn., and the State systems of public schools of Tennessee and Alabama, lectured on home economics in teachers' institutes and summer schools, held conferences of specialists in home economics, and represented the bureau at educational conventions.

They also rendered assistance to the Food Administration and to the Department of Agriculture in formulating material for publication in bulletins on home economics. One specialist assisted in the nursing and food service at the emergency hospital in Washington during the influenza epidemic in November. Special studies have been begun of the reorganization of home economics instruction in secondary schools, and of State and Federal legislation relating to home economics in the schools.

This division prepared the chapters on "Vocational Education" and "Home Economics" for the Biennial Survey of the Bureau of Education, and a revised "Bibliography of Home Economics Instruction," also the manuscripts for the following publications:

Industrial Education Circular No. 1, Lessons from the War and Their Application in the Training of Teachers.

Industrial Education Circular No. 2, The Cooperative School.
Industrial Education Circular No. 4, The Army Trade Tests.
Home Economics Circular No. 7, Effect of War Conditions on Clothing and Textile Courses.
Home Economics Circular No. 8, Brief Courses in Home Making for Normal Schools.

DIVISION OF SCHOOL HYGIENE AND PHYSICAL EDUCATION.

During the year 1918–19, the Division of School Hygiene and Physical Education has had the full-time services of one specialist in hygiene and physical education and one assistant; the part-time services of one special agent in schoolhouse construction and sanitation; the services for six months of a field agent for school health organization, in cooperation with the Public Health Service; valuable expert and clerical assistance through the cooperation of the Child Health Organization of New York; and the cooperative services of several special collaborators.

The work of the division has included correspondence, office and research work, publications, attendance upon meetings of associations, addresses, conferences, surveys and investigations, special studies and cooperation with other Government and voluntary organizations.

The correspondence of the division has been large and varied, covering all phases of school hygiene and physical education. The correspondence relative to schoolhouse construction and sanitation has been taken care of by the special agent in school sanitation, with offices at George Peabody College for Teachers, Nashville, Tenn. It has included help to school boards in planning school buildings, selection of sites, and criticisms of proposed plans submitted by architects.

The general office work has included preparation of memoranda for the Commissioner of Education, the examination and report upon manuscripts on school sanitation, health instruction, and physical education submitted for publication (about 25 in number), revision of manuscripts for publication, assistance to other divisions relative to hygiene and physical education, the preparation of special bibliographies, preparing and furnishing special information to responsible inquiries (e. g., a list of organizations interested in conservation of vision), indexing and filing correspondence, indexing and keeping the card catalogue up to date on the reference in current literature for the various phases of school hygiene and physical education.

The specialist in school hygiene and physical education has attended and addressed a large number of meetings, including the National Education Association, American Public Health Association, National Child Labor Committee, Southern Sociological Con-

gress, American Physical Education Association, the Missouri State Health Conference, and others. He has organized and held conferences in connection with meetings of the Department of Superintendence of the National Education Association and the American Physical Education Association.

The division, through the specialist and special agents, has taken part in the bureau's surveys of the school systems in the State of Alabama and the city of Memphis. Their work has covered sites and buildings, health supervision, health instruction, and physical training activities. In addition, special field studies have been made in the organization of physical education and health work in the schools. School authorities have been conferred with and advised with respect to these matters. The special agent in schoolhouse construction has given personal aid to school boards in the following cities with respect to their building plans: Montgomery, Ala.; Tuscaloosa, Ala.; Bristol, R. I.; Helena, Ark.; Reno, Nev.

The specialist in school hygiene and physical education has prepared for the Biennial Survey a summary of important developments in education in hygiene during the biennium of 1916–1918; in cooperation with Dr. T. A. Storey, Bulletin No. 40, 1919, "Recent State Legislation for Physical Education;" an analytical summary of the legislation in question and statement of principles giving such legislation; a preliminary report on "The Closure of Schools as a Means of Controlling Communicable Diseases" (in cooperation with the committee of the American Public Health Association).

The study of physical education in normal schools begun last year has been continued with an attempt to get reports from all normal schools on this phase of work. This is not intended for publication at this time.

In collaboration with Supt. Grover C. Thames, of Magnolia, Miss., a study has been made by questionnaire of physical education in the State of Mississippi. This work is incomplete.

A complete study of the organization and conduct of school health supervision has been outlined and begun. A preliminary tabulation and analytical study of the State laws have been completed. A questionnaire has been outlined for all cities of 2,500 inhabitants and will be sent out in the fall. It is proposed to extend this inquiry to rural and village communities. The object is to get, at the end of the five-year period, as complete a picture as possible of the character and extent of school health supervision throughout the country.

A study of janitor service in city schools has been begun in cooperation with the division of city schools.

Every effort has been made to cooperate with other governmental and voluntary agencies which have to do with school hygiene and physical education, with the ultimate object of coordinating as far

as possible the forces and influences that touch the schools. Some effective cooperation has been carried on with the Public Health Service, Interdepartmental Social Hygiene Board, Boys' Working Reserve, Junior Red Cross, the American Physical Education Association, the Child Health Organization, National Anti-Tuberculosis Association, and others. The following special pieces of cooperation have been noteworthy:

In cooperation with the Child Health Organization, the bureau has undertaken to direct the wide-spread interest in health incident to the war toward simple and practical methods of health teaching in the schools. To this end a health education series, consisting of Classroom Weight Record and four pamphlets, has been published. The cooperation of 30 State superintendents and hundreds of city and county superintendents has resulted in a widespread use of this material. A number of large cities have adopted the plan as part of their regular curriculum. Among these are Chicago, Kansas City, Mo., and Portland, Oreg. The program has aroused enthusiastic interest of many organizations, including the National Tuberculosis Association, the Federation of Women's Clubs, the woman's committee of the Council of Defense, State health boards, the home demonstration agents of the Department of Agriculture, and others. Very important service has been rendered by such organizations in bringing this method of health education to the attention of communities, which in turn, have made it possible for the school authorities to put the plan into effective use in the schools. The interest in the work is constantly growing as is indicated by the rapidly increasing number of inquiries and requests for material and assistance.

At the request of the Public Health Service, the specialist in school hygiene was detailed to advise with the officers of the division of venereal diseases of the Public Health Service relative to "plans for sex education and measures for securing the necessary cooperation of the educational systems of the country." Many informal and a few formal conferences have been held with representatives of the Public Health Service for the purpose of making effective the terms of the detail. The object was to bring together, for exchange of views and experiences, teachers and others who might have something to contribute. As a result there has been brought to light a good deal of intelligent sex education work in connection with home economics, physical education, civics, and literature. The keynote has been the development of positive ideals of physical strength and vigor and social uprightness.

A series of pamphlets for high-school teachers has been planned, largely influenced by conference experiences.

As reported last year, a national committee on physical education, consisting of representatives of national organizations, was formed

for the purpose of encouraging legislation for physical education. At the request of the committee, the Playground and Recreation Association of America established a new branch under the title of the National Physical Education Service, with the specific object of furthering legislation for physical education.

DIVISION OF COMMERCIAL EDUCATION.

Because of the great interest now manifest in commercial education, especially for our large prospective foreign commerce and in education for foreign service in industrial enterprises and otherwise, the pressure on the Division of Commercial Education has been very great.

During the fiscal year 1918–19 the bureau conducted the following surveys, the complete results of which will be published as bulletins of this bureau:

1. A survey of 15 major cities in cooperation with the Bureau of Foreign and Domestic Commerce, Committee of Fifteen on Educational Preparation for Foreign Service, American Association of Urban Universities, and local committees with representation from trade, industries, and education.

2. A survey of all cities with 25,000 inhabitants and over, about 250 in all, carried on direct from the bureau in cooperation with local committees, of which the city superintendent of schools acted as chairman.

The purpose of these two surveys is to ascertain the extent and character of the foreign business of these cities, the number of people employed, and the kind of service rendered by them, and whether and how the schools and colleges can train men and women for foreign business.

3. In cooperation with the educational director of that association, surveys of the work conducted by the educational departments of the Young Men's Christian Association.

4. A survey of all commercial teacher-training work carried on in colleges, universities, and normal schools.

5. A survey of colleges and universities to ascertain what facilities they offer in preparation of the students in engineering or business for management positions in industry and commerce, and for overseas engineering development project and commercial enterprises.

The results of this last investigation served as a basis for the constructive work of the commercial engineering conferences of February 22, March 31, and April 1, and June 23 and 24, which were held in St. Louis and Washington. The genesis and development of this project, including the proceedings in full of the public conference of June 23 and 24, have been prepared for publication as a bulletin of this bureau.

In addition to these surveys a bulletin has been prepared on "Training for Foreign Service"; and, in cooperation with a committee from the Association of Accredited Schools a "Course of Study for Use in Private Business Schools." A brief but definite statement is in preparation in respect to training for business in the 21 countries constituting the Pan-American Union. This work is being done in cooperation with a well-equipped scholar in each of these countries.

STATISTICAL DIVISION.

The statistical blanks used in gathering information from the various schools and school systems were revised in July, 1918. This revision was completed after a consultation with a committee of State superintendents appointed by the National Education Association for the purpose of cooperating with the Bureau of Education in revising statistical schedules and in bringing about a uniform method of collecting educational statistics. Blanks were completed in July and August.

During July, August, and September, 1918, the Statistical Division continued the attempt to complete a mailing list of all school buildings in the United States. During this time about 65,000 additional schools were added to this list. The list of buildings now contains approximately 240,000 plates, each of which represents a school building. The greater part of this list was completed during the preceding fiscal year.

In July, August, and September, 1918, this division prepared the following sections of the educational directory for 1918–19: List of principal State school officers, county superintendents, city superintendents, normal schools, and colleges and universities.

Statistical blanks were mailed to approximately 40,000 different schools and school systems. The returns from the 480 summer schools reporting were tabulated and completed in April, 1919, and the report sent to the printing office. The chapter on private commercial and business schools was completed in June, 1919. None of the other chapters were completed during the fiscal year, but they were all in progress. Work was done on the following chapters: State reports, State school systems, city public schools, public high schools, private high schools, schools for the deaf, schools for the blind, schools for the feeble-minded, industrial schools for delinquents, nurse-training schools, normal schools, and colleges and universities.

A great volume of work is involved in sending forms to such a large list of schools, in checking these returns, in editing the reports, in tabulating the data, and interpreting the statistics. The modifications incorporating the blanks made it increasingly difficult to secure

complete returns, but the modifications incorporated promise greater uniformity in reports in the future. The work during the year was also more or less delayed by the fact that a number of schools were closed for several weeks on account of the epidemic of Spanish influenza.

DOCUMENTS ISSUED DURING THE YEAR 1918–19.

BULLETINS, 1918.

2. The publications of the United States Government.
5. Work of the Bureau of Education for the natives of Alaska.
6. The curriculum of the woman's college.
10. Public school classes for crippled children.
15. Educational survey of Elyria, Ohio.
16. Facilidades ofrecidas a los estudiantes extranjeros.
17. History of public school education in Arizona.
18. Americanization as a war measure.
19. Vocational guidance in secondary education.
20. Monthly record of current educational publications, June, 1918.
21. Instruction in journalism in institutions of higher education.
22. Monthly record of current educational publications, index, February, 1917–January, 1918.
25. Industrial education in Wilmington, Del.
26. The National Council of Primary Education. (Reprinted.)
27. Rural-teacher preparation in State normal schools.
28. The public schools of Columbia, S. C.
29. American agricultural colleges. (Reprinted.)
30. Resources and standards of colleges of arts and sciences.
31. The educational system of South Dakota.
32. Teaching American ideals through literature.
33. Monthly record of current educational publications, September, 1918.
34. Monthly record of current educational publications, October, 1918.
35. Cardinal principles of secondary education.
36. Educational directory, 1918–19.
37. Courses of study for the preparation of teachers of manual arts.
38. Kindergarten supervision in city schools.
39. Monthly record of current educational publications, November, 1918.
40. Recent State legislation for physical education.
41. Statistics of agricultural and mechanical colleges, 1916–17.
42. Monthly record of current educational publications, December, 1918.
43. Instruction in art in the United States. (Advance sheets from biennial survey, 1916–1918.)
44. Agricultural education.
45. Educational surveys.
46. Medical education.
47. Secondary education.
48. Public education in the cities of the United States.
49. Kindergarten education.
50. Home economics.
51. Statistics of State universities and State colleges.

BULLETINS, 1919.

1. Monthly record of current educational publications, January, 1918.
3. Home education.
4. A manual of educational legislation.
5. Instruction in music.
6. A half-time mill school.
7. Rural education.
8. Life of Henry Barnard.
9. Education in Great Britain and Ireland.
10. Educational work of the churches in 1916–1918.
11. Monthly record of current educational publications, February, 1919.
12. Education in the Territories and dependencies.
13. Review of educational legislation, 1917 and 1918.
14. Monthly record of educational publications, March, 1919.
16. The kindergarten curriculum.
17. Educational conditions in Spain.
18. Commercial education.
19. Engineering education.
21. Education in Germany.
23. Monthly record of current educational publications, April, 1919.
24. Educational work of the Boy Scouts.
25. Vocational education.
26. The United States School Garden Army.
27. Recent progress in Negro education.
29. Schools of Scandinavia, Finland, and Holland.
30. The American spirit in education.
32. Monthly record of educational publications: Index, February, 1918–January, 1919.
33. Girl Scouts as an educational force.
34. Monthly record of current educational publications, May, 1919.
36. Education in Italy.
38. Education in Switzerland, 1916–1918.
41. An educational study of Alabama.
42. Monthly record of current educational publications, June, 1919.

TEACHERS' LEAFLETS.

No. 1. Opportunities for history teachers.
No. 2. Education in patriotism.
No. 3. Government policies involving the schools in war time.
No. 4. Outline of an emergency course of instruction on the war.
No. 5. Certain defects in American education, and the remedies for them.

LIBRARY LEAFLETS.

No. 1. List of references on rural life and culture.
No. 2. List of references on educational tests and measurements.
No. 3. List of references on play and playgrounds.
No. 4. List of references on the economic value of education.
No. 5. List of references on the junior high school.

HEALTH EDUCATION SERIES.

No. 1. Wanted teachers to enlist for child-health service.
No. 2. Diet for the school child.

No. 3. Summer health and play school.
No. 4. Methods of teaching health.
Cards—Right height and weight.
Poster—Health, strength, and joy.

KINDERGARTEN CIRCULARS.

No. 3. The kindergarten and Americanization.

SECONDARY SCHOOL CIRCULARS.

No. 3. Science teaching in secondary schools in the war emergency.
No. 4. Industrial arts in secondary schools in the war emergency.

HIGHER EDUCATION CIRCULARS.

No. 11. The Bureau of Education and the educational survey movement.
No. 12. Opportunities at college for returning soldiers.
No. 13. The college catalogue.
No. 14. Advanced educational work within a Government bureau.

INDUSTRIAL EDUCATION CIRCULARS.

No. 1. Lessons from the war and their application in the training of teachers.
No. 2. The cooperative school.
No. 3. Industrial art as a national asset.
No. 4. The Army trade tests.

HOME ECONOMICS CIRCULARS.

No. 2. Current problems in home economics.
No. 3. Teaching in small high schools.
No. 4. Principles and policies in home economics education.
No. 5. Government publications for home economics teachers and students.
No. 6. A course in food economics for the housekeeper.
No. 7. Effect of war conditions on clothing and textiles courses.
No. 8. Brief courses in home making for normal schools.

READING COURSES.

No. 1. The world's great literary Bibles.
No. 2. Great literature—Ancient, medieval, and modern.
No. 6. Thirty books of great fiction; sections A and B.
No. 7. Thirty world heroes; sections B and C.
No. 9. Thirty American heroes.
No. 10. American history (reprint); sections A and B.

COMMUNITY CENTER CIRCULARS.

No. 1. Constitution of community associations.
No. 2. Community buildings as soldiers' memorials.

LESSONS IN COMMUNITY AND NATIONAL LIFE.

Series A, B, and C.

SCHOOL LIFE (SEMIMONTHLY).

Index and title page, Vol. 1, August–December.
Vol. 1, ten numbers, beginning August 1, 1918.
Vol. 2, twelve numbers.
Vol. 3, two numbers.

AMERICANIZATION (MONTHLY).

Vol. 1, ten numbers, beginning September 1, 1918.

MISCELLANEOUS PUBLICATIONS.

Rules and regulations regarding the United States reindeer service in Alaska.
Europe's educational message to America.
Broadside—Three genies of the hand grenade.

UNFINISHED PRINTING.

The following documents were in the hands of the printer at the close of the year:

The National Council of Primary Education.
Standardization of medical inspection facilities.
The adjustment of the teaching load in a university.
The rural teachers of Nebraska.
A survey of higher education, 1916–1918.
Educational periodicals during the nineteenth century.
Summer schools in 1919.
The junior college.
Educational changes in Russia.
Training little children.
Work of the Bureau of Education for the natives of Alaska.
Education in France.
Modern education in China.
Library Leaflet No. 6: Stories for young children.
Kindergarten Education Circular: Manufacturers indorse the kindergarten.
Reading Course: France and her history.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1920

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920

THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.

Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to date.

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LETTER OF TRANSMITTAL.

Department of the Interior,
Bureau of Education,
Washington, October 17, 1920.

My Dear Mr. Secretary: I am transmitting herewith the Report of the Commissioner of Education for the fiscal year ending June 30, 1920. Following the custom adopted three years ago, this annual report is made in brief form and contains only brief summaries of progress in the more important phases of education in the United States and, also in condensed form, a statement of the activities of this bureau.

Formerly the annual report was printed in two large volumes, one containing statistics of education in the United States, the other containing interpretative accounts of the progress of education in the United States and other culture countries. Four years ago it was thought best to discontinue this form of the annual report and to make such a report biennially. This is done under the title "Biennial Survey of Education." The last biennial survey was for the period ending June 30, 1918. The biennial survey for the two years ending June 30, 1920, will be prepared and printed as soon as returns from the several States, cities, and individual institutions of education can be obtained, tabulated, and interpreted.

Respectfully submitted.

P. P. Claxton,
Commissioner.

REPORT OF THE COMMISSIONER OF EDUCATION.

PART I.

SOME ASPECTS OF EDUCATION IN THE UNITED STATES.

HIGHER EDUCATION.

During the past year institutions of higher learning have been attempting to adjust themselves to the effects of the war. The first one of these was the great increase in the student enrollment in the colleges and universities at the beginning of the college year 1919–20. Notwithstanding the losses in registration during the war, the number of students attending colleges and universities in the college year following the war increased about 25 per cent over the number attending in 1916–17, the year prior to the war. Undoubtedly a deferment of registration by those who had planned to enter college during the two previous years accounts in large part for the tremendous increase in student attendance.

Such an increase in the student body in nearly all cases called for considerable additions to the faculty. This demand was a source of unusual financial embarrassment for the reason that the budgets of colleges and universities, whether State or privately controlled, had been made up on the basis of definite incomes, which allowed little expansion. Furthermore, members of the faculty who had remained loyal to the institutions and were suffering from the effects of the high cost of living deserved very generous increases in salary.

The embarrassing financial conditions in higher institutions called for speedy action wherever possible. State institutions were seldom able to secure relief at once, as the majority of State legislatures did not meet during the academic year 1919–20. In the winter of 1920–21 four-fifths of them will be in regular session, when, on account of the tremendous increase in the cost of instruction and the number of students attending higher institutions, they will be confronted with the necessity of appropriating unprecedented funds for the support of higher education.

Colleges and universities supported by private funds, though not experiencing in general quite the great increase in students as the

State institutions, nevertheless realized at once the necessity of appealing to their constituents for financial relief. As a result drives for increased endowments for privately supported colleges and universities have been during the year both widespread and intensive. In Wisconsin the presidents of the private colleges effected an organization whereby their efforts for increased support could be pooled into one united drive. The smaller colleges, many of which are controlled by or affiliated with some religious denomination, are securing increased endowments through the efforts of their respective denominations, nearly all of which are conducting intensive drives for increased funds.

Naturally the endowment campaigns which have come most to public attention are those of the large privately controlled colleges and universities, such as Harvard, Cornell, Chicago, Massachusetts Institute of Technology, Princeton, Northwestern, Smith, Wellesley, and New York University. The campaigns of three of the institutions—Harvard, Princeton, and the Massachusetts Institute of Technology—have received noteworthy assistance through the will of Henry C. Frick, who left them a total of $20,000,000.

In the meantime the character of work done at colleges and universities has suffered a severe handicap. Classes have perforce been much larger than experience shows to be wise. Immature and in some cases relatively untrained men have been called in to carry on the work of instruction. Older members of the faculty who have been in the habit of increasing their value as teachers and enriching the entire scientific world by their research, have been called away from the library and the laboratory to teach overcrowded classes. Other professors of long experience as teachers have succumbed to the temptation of larger salaries to be gained in business and industry, which seem suddenly to have realized more than ever before the value of college-trained men. None of these adverse conditions can be relieved until an adequate program of financial support for higher institutions in the United States is adopted. It is now beginning to be a question frequently discussed as to whether the Federal Government, with greater taxing possibilities, should not assume greater responsibility than it does at present for the development of higher education.

ATTENDANCE AT COLLEGES AND UNIVERSITIES.

In order to indicate more clearly the character of the increased attendance at colleges and universities during the year 1919–20 as compared to attendance before the war, the following table is presented. The table was compiled from reports received from 250 of the colleges and universities of the country. Of particular significance is the growth of attendance at the publicly supported institu-

tions as compared to the privately supported ones. It should be noticed, however, that the smallest institutions have made the largest relative increase in student enrollment, while the largest institutions increased at the next fastest rate. The great increase is, as might be expected, in the freshman class.

Three years of attendance at colleges and universities.

PUBLIC AND PRIVATE INSTITUTIONS.

	Institutions reporting.	Seniors.			Freshmen.			Total enrollment.[1]		
		Nov. 1, 1916.	Nov. 1, 1919.	Per cent of increase.	Nov. 1, 1916.	Nov. 1, 1919.	Per cent of increase.	Nov. 1, 1916.	Nov. 1, 1919.	Per cent of increase.
1	2	3	4	5	6	7	8	9	10	11
Public	56	8,818	9,562	8.4	21,399	34,620	61.8	67,022	87,932	31.2
Private	194	12,802	13,502	5.5	26,578	35,487	33.5	82,511	98,932	19.9
Total	250	21,620	23,064	6.7	47,977	70,107	46.1	149,533	186,864	25.0

CLASSIFICATION AS TO ENROLLMENT IN 1916.

1	2	3	4	5	6	7	8	9	10	11
Enrollment less than 250	122	2,311	2,525	9.3	6,291	9,273	47.4	16,342	22,544	38.0
Enrollment, 250 to 499	47	2,263	2,379	5.1	5,468	7,986	46.0	16,341	19,649	20.2
Enrollment, 500 to 999	44	3,539	3,912	10.5	10,553	13,053	23.7	29,592	33,889	14.5
Enrollment, 1,000 to 1,999	22	4,147	4,516	8.9	9,484	12,802	35.0	30,991	37,949	22.5
Enrollment, 2,000 or over	15	9,360	9,732	4.0	16,181	26,993	66.8	56,267	72,833	29.4
Total	250	21,620	23,064	6.7	47,977	70,107	46.1	149,533	186,864	25.0

INSTITUTIONS FOR MEN, FOR WOMEN, OR COEDUCATIONAL.

1	2	3	4	5	6	7	8	9	10	11
Coeducational	160	16,525	17,333	4.9	36,397	54,211	48.9	115,605	144,949	25.4
Men only	49	2,774	2,932	5.7	6,411	9,419	46.9	18,089	23,280	28.7
Women only	41	2,321	2,799	20.6	5,169	6,477	25.3	15,839	18,635	17.7
Total	250	21,620	23,064	6.7	47,977	70,107	46.1	149,533	186,864	25.0

GROWTH BY SECTIONS OF THE COUNTRY.

1	2	3	4	5	6	7	8	9	10	11
United States	250	21,620	23,064	6.7	47,977	70,107	46.1	149,533	186,864	25.0
North Atlantic Division	46	7,055	7,370	4.5	11,694	14,230	21.7	42,046	48,755	15.1
North Central Division	101	8,790	9,336	6.2	21,406	32,343	51.1	61,006	75,027	23.0
South Atlantic Division	41	1,675	1,948	16.3	4,727	7,263	53.0	14,159	18,890	33.4
South Central Division	31	1,295	1,308	1.0	3,860	5,940	53.9	11,164	14,651	31.2
Western Division	31	2,805	3,102	10.6	6,270	10,331	64.8	21,158	29,541	39.6

[1] For all 4 classes.

SALARIES AT COLLEGES AND UNIVERSITIES.

During the year the Bureau of Education made an exhaustive study of salaries at more than two-thirds of the colleges and universities in the country. A summary of them is given in the following table:

Salaries in universities and colleges.

IN PUBLIC INSTITUTIONS.

Title of position.	Number of persons.	Minimum salary.	Maximum salary.	Average salary.	Median salary.	Most frequent salary.
President or chancellor	77	$2,500	$12,500	$6,647	$6,000	$6,000
Dean or director	367	1,200	10,000	3,819	3,500	3,000
Professor	2,460	300	10,000	3,126	3,000	3,000
Associate professor	822	300	4,000	2,514	2,500	3,000
Assistant professor	1,705	500	1,000	2,053	2,000	1,800
Instructor	2,138	300	3,100	1,552	1,500	1,500
Assistant	855	75	2,500	801	750	1,200

IN PRIVATE INSTITUTIONS.

President or chancellor	287	$900	$12,000	$3,918	$3,500	$3,000
Dean or director	504	400	10,000	2,3 9	2,000	2,000
Professor	3,781	100	10,000	2,504	2,000	1,500
Associate professor	357	600	4,500	2,4 3	2,300	2,000
Assistant professor	1,261	75	5,000	1,770	1,800	2,000
Instructor	1,810	50	4,000	1,205	1,200	1,200
Assistant	574	10	2,000	472	400	500

These figures reveal the very serious condition of the teaching profession in higher institutions. Salaries of college professors and instructors have not only fallen far below those paid in many other professions, but they have been reduced to a level even below the average wage received by many mechanics and tradesmen. As long as this condition obtains it will be difficult to induce men of superior ability to spend the needed years of collegiate and postgraduate study necessary to fit them for positions in higher institutions.

JUNIOR COLLEGES.

The increase in collegiate attendance has intensified the growing demand for some reorganization or readjustment of higher education in which the junior college as a possible solution has played a prominent part. Privately supported junior colleges have so far exceeded in number the public junior colleges. Partly by reason of denominational encouragement and partly through the realization that a much better grade of work can be done if they confine themselves to the freshmen and sophomore years, a considerable number of four-year colleges with inadequate support have become junior colleges. In Texas and Missouri especially they have affiliated their work closely with the State universities.

On the other hand, the numbers of publicly supported junior colleges have recently increased notably, the way being led by California several years ago. Minnesota, Illinois, and Michigan have established several junior colleges in the large cities. Newark, N. J., is the first city in the Eastern States to establish a junior college.

So extensive has the junior-college movement become that at the call of the Commissioner of Education the first conference of representatives from junior colleges met at St. Louis, Mo., June 30, and July 1, 1920. The conference was attended by 30 representatives from junior colleges located all over the country. The development of junior colleges and the problems of junior colleges, including the curriculum, were the subjects uppermost in the minds of those at the conference. The benefits to be gained from similar meetings appeared to be so clear that at the close of the two-day session it was unanimously decided to effect a permanent organization. The new association expects to hold annual meetings.

RESERVE OFFICERS' TRAINING CORPS.

The Reserve Officers' Training Corps has passed through the first year following its reestablishment in colleges and universities after the demobilization of the Students' Army Training Corps. During this time units have been located in 142 higher institutions, with a total enrollment of 43,687. The infantry units greatly predominate in number, but an attempt is making to diversify the character of the units, as is shown by the following table:

Reserve Officers' Training Corps units.

	Senior units.	Enrollment.
Infantry	119	32,390
Cavalry	10	948
Field Artillery	20	4,348
Coast Artillery	18	2,687
Engineer Corps	19	1,948
Signal Corps	11	704
Motor Transport Corps	8	461
Ordnance Department	3	201
Total	208	43,687

The war not only demonstrated the ability in general of college men to qualify quickly for the usual assignments as military officers, but it also revealed the value of higher technical training in the prosecution of modern warfare. For these reasons the colleges and universities appear to be a fertile field for producing reserve officers. The number of colleges which have voluntarily added units of the Reserve Officers' Training Corps is nearly twice as great as the number which previously had military training under the provi-

sions of the Morrill Act. This fact is a testimony to the new and favorable attitude which college executives are taking toward military training. At the same time it should be remembered that the type of training provided in the Reserve Officers' Training Corps units comprises less of the old formal drills and more of the scientific and technical work useful in civil as well as military life.

As a means of providing reserve military officers, the Reserve Officers' Training Corps has not been in operation long enough to afford an opportunity for an accurate estimate. In June, 1920, 982 students completed the advanced course, which comprises the last two years of the usual four-year course. Of these, 483 were 21 years of age or older, and were therefore eligible for commissions immediately. When the Reserve Officers' Training Corps is in full swing it is expected that the number of persons eligible annually for reserve commissions will reach 5,000.

Junior units of the Reserve Officers' Training Corps have been established in 39 essentially military schools of secondary grade, in 49 public high schools, and in 19 private secondary schools. The total enrollment in the junior units at the close of the year June 30, 1920, was 44,777. In the secondary schools the usual military drills occupy the greater portion of the time devoted to the Reserve Officers' Training Corps work.

With the removal in the Army reorganization act of June 4, 1920, of the limitation on the number of officers who can be located with Reserve Officers' Training Corps units, it becomes practicable to extend the number of units materially. During the year just closed 388 military officers were assigned to Reserve Officers' Training Corps units in colleges and secondary schools.

THE NATIONAL RESEARCH COUNCIL.

On June 30, 1919, the National Research Council severed its direct connection with the Government, which during the war had been maintained through the Council of National Defense. Even previous to that time it had so far as possible finished the research program undertaken during the war and had turned its attention to the problems of peace. Dr. Vernon Kellogg, chairman of one of the council's divisions, states a portion of the program confronting the council in the following way:

> We need a great cooperative scientific investigation of food and nutrition; the National Research Council has put it under way. We need far more study on a very wide scale of the problems connected with the preparation and use of fertilizers, of ceramics, of alloy steels, of synthetic drugs. The council has begun this study. There are great scientific problems of direct bearing on our national well-being in connection with public health and sanitation, with forestry, with intensive agriculture. And there are many others which may not

at the moment seem to have so tangible a relation to practical affairs, the solution of which may, nevertheless, serve as the indispensable fundamental basis for future practical use.

In order to carry out this program it has been necessary for the National Research Council to secure from outside agencies funds which have been generously supplied by the Carnegie Corporation, the Rockefeller Foundation, and the General Education Board. The funds are used to establish research fellowships in physics and chemistry, for the current expenses of the council, and for erecting a building in Washington, D. C., which will house both the National Research Council and the Academy of Sciences.

The council conducts its work through divisions which are of two types, general relations and divisions of science and technology. Of especial interest to the colleges and universities of the country is the Division of Educational Relations, which during the past year has carried out a survey of research conditions in the higher institutions. The survey has been made more complete by a large number of personal visits to many colleges and universities by members of the council's staff. The conditions existing in these institutions not only reveal the pressing need for more adequate training of men and women in research methods but for time in which competent members of the faculty may pursue researches in pure science. Failing this time, many able men will shun the teaching profession in higher institutions, and those who are located there at present will be sorely tempted to enter the industrial world, where facilities for commercial research are constantly increasing.

The National Research Council is conducting a campaign for a more adequate recognition of the value of research to higher institutions. At the same time it is attempting to coordinate research work in all fields by stimulating research in some directions and preventing duplication in others.

GENERAL INTELLIGENCE TESTS.

During the year considerable use has been made of the general intelligence tests, which were first popularized in the Army during the World War. The Army tests, which were taken by 1,726,966 officers and enlisted men, were regarded as so successful in the selection of capable men that the question has been raised seriously in colleges and universities as to whether they ought not to be substituted in whole or in part for the usual content examinations, especially entrance examinations.

At Columbia University students may use the intelligence tests as an alternative means of entering the university. In September, 1919, about 200 students passed the intelligence tests at Columbia. In his annual report for 1919 President Butler states that "the results were

found to be effective in selecting students of high quality, both intellectually, morally, and socially."

The number of colleges and universities which have given the general intelligence tests is quite large. In May, 1920, the Bureau of Education ascertained that 124 colleges and universities out of a total of 228, which replied to a letter of inquiry, had given some form of the tests. Not included in this number, however, are a number of higher institutions which have been cooperating with a committee on intelligence tests of the Society for the Promotion of Engineering Education. It is safe to estimate that about 200 colleges and universities have used intelligence tests.

At many other colleges and universities the tests have been given not only to determine their value as an alternative method of college entrance but to help students in the choice of college courses of study and of vocations after graduation. In fact, it seems clear that with the proper organization in higher institutions the general intelligence tests could be made of great value. Prof. Edward L. Thorndike, of Columbia University, one of the greatest advocates of the tests, has the following to say concerning them:

> Given a well-planned and sufficiently extensive team of tests, a correlation of 0.60 (1 being a perfect score) is obtained between the candidate's score and his academic achievement during the first half of the freshman year. Inasmuch as the academic achievement of a pupil is determined in part by his health, economic conditions, and moral qualities, an absolutely omniscient judge of his intellect could probably not give ratings that would correlate with his academic achievement much more than 0.70. Also the college ratings are themselves not infallible, and these errors reduce or "attenuate" the correlation. The psychologist may then fairly claim that the factors of intellectual ability as born in the boy and developed to date by the training he has had are substantially summed up in his score in the psychological tests. * * *
>
> This 0.60 is a closer prophecy than any three-hour examination of the traditional type has ever been shown to give. It is, in fact, as good as the correlation obtained by using the total information from 16 to 20 hours of examinations of the traditional type. Much more important than this, however, is the fact that by adding it to a system of content examinations, or a system of ratings of the candidate by the school whence he comes, or a system of inspections of that school by the college, the selection is improved. A competent psychological examination, that is, gets at factors which have prophetic value and which no other existing systems get at in the same way. It may or may not be desirable in certain cases as an alternative to these various systems, but it certainly improves the selective action of any of them.
>
> Its value as an adjunct to a system of crediting school work, in fact, deserves special mention. Such systems, beneficent as they are, have the necessary weakness of overweighting educational regularity, docility, and good intent. The boy or girl who does the regular thing in the regular way and wins the moral approval of his teachers may slip along into the university in spite of a lack of the essential brain power needed to profit by a college or professional course. You all know such cases. A competent intelligence examination discovers them almost without fail. On the other hand, the boy or girl whose

schooling has been irregular or whose abilities are specialized or whose conformity to teachers' edicts is imperfect finds himself delayed or even barred in his progress on to college. A competent intelligence examination differentiates these irregulars into the strong, who are just the element our colleges need, and the weak, who have not met past requirements by reason of their weakness.

SURVEY OF THE COLLEGE OF HAWAII.

During the year the Bureau of Education made a survey of the school system of the Hawaiian Islands, including the College of Hawaii. The survey revealed that, of the 393 students from Hawaii who during the past 10 years have attended higher institutions, only 113, or 29 per cent, have gone to the College of Hawaii. One of the reasons for this situation has been the natural desire of emigrants from the mainland to have their sons and daughters educated at old and well-established higher institutions in the United States. Furthermore, the character of training which students have been able to secure at the College of Hawaii has been restricted to the kind usually obtaining in a land-grant college. Responding to a well-defined popular demand, the Territorial legislature early in 1920 expanded the work of the College of Hawaii into the University of Hawaii by adding a considerable number of courses in arts and sciences.

In order that the new university may do its work more effectively, the survey commission recommended that provision be made for members of the faculty to visit higher institutions on the mainland at regular intervals; that instruction and research in agriculture be more closely coordinated; that "Territory-wide" extension activities should be established; and that plans be effected for training secondary-school teachers more adequately.

COOPERATION BETWEEN INDUSTRY AND HIGHER INSTITUTIONS.

During the year two distinct movements toward cooperation between industry and higher institutions have taken shape. One of these movements, a very comprehensive one, was begun by Dr. Hollis Godfrey, president of the Drexel Institute, in cooperation with the American Council on Education, representing the higher institutions, and with representatives of a large number of industries. The industries are to write the specifications of the men whom they will need to employ. These specifications will then be reviewed by a committee of the American Council on Education and passed on to the colleges and universities for their guidance in training men.

The other movement in this direction has been conducted by the Bureau of Education, with the cooperation of representatives from the National Bureau of Public Roads, higher institutions, and the automobile industries. At a national conference held in Washing-

ton May 14 and 15, 1920, plans were devised, which have later been carefully worked out, to ascertain the number of men who are needed to fill positions in highway construction on the one hand and in the automobile industries on the others. This information will be distributed by the Bureau of Education to the colleges and universities of the country.

Through such means it is hoped to bring the higher institutions into closer relations with the needs of the industries. That so little attention has been paid in the past to possibilities of this character seems very strange, and it argues for the necessity of speedy action in the solution of the difficulties.

THE AMERICAN COUNCIL ON EDUCATION.

Following the war the American Council on Education, which had been established during the war emergency as a coordinating central agency of higher institutions, was reorganized for a peace-time program, and a director, Dr. S. P. Capen, was appointed to devote full time to the council's activities. Dr. Capen has the following to say concerning the council's object and membership:

> The American Council on Education is the central organization in which the great national associations are represented. Its general object is to promote and carry out cooperative action in matters of common interest to the associations and to the institutions composing them. It has three classes of members—constituent, associate, and institutional. The constituent members are 16 national educational associations. Each is represented by three delegates, who vote as a unit at meetings of the council through a designated person. Associate members are educational or scientific organizations having interests related to the work of the council. Associate members may send one representative each to the meetings of the council without right to vote. Institutional members are colleges, universities, professional and technical schools contributing not less than $100 a year to the treasury of the council. Each may be represented by one delegate at meetings of the council without right to vote.

Although the council has been active for only a little more than one-half of the year, it has already accomplished a variety of useful objects. One of these has been to hold a referendum among colleges and universities to secure a consensus of opinion on the Smith-Towner bill now before Congress. Tentative plans have also been adopted for a uniform treatment of holders of French degrees and certificates. If this plan is adopted by the colleges and universities, an important step will have been taken in the direction of standardizing the treatment of foreign students in this country.

The council has from the beginning been greatly interested in the movements to induce a larger number of foreign students to matriculate in American higher institutions. For this reason the Association of American Colleges early in 1920 transferred to the council the supervision of the scholarships granted by American colleges to

young women from France. In 1919–20, 182 French girls attended colleges in this country. The council has also selected the 20 American young women who are attending French lycées and the 16 young men who, through the generosity of the French Government, hold graduate scholarships and fellowships at the Universities of Bordeaux and Toulouse.

INTERNATIONAL HIGHER EDUCATION.

Two organizations of recent origin, the Institute of International Education and the American University Union in Europe, have done important service in fostering international higher education. The former has collected and sent to American colleges and universities information concerning foreign educational missions and concerning professors who are willing to accept temporary appointments in American colleges and universities. It has also stimulated the movement toward the establishment of international fellowships and scholarships. Through the action of American colleges, the Rockefeller Foundation, the French Government. the American-Scandinavian Foundation, and a number of other agencies, the number of American students studying in foreign higher institutions and of foreign students enrolled at colleges and universities in this country has increased greatly. Such an exchange of students and professors will be an important element in building an enduring international friendship.

The American University Union in Europe is attempting to serve American students and professors temporarily residing in foreign higher institutions. It has established branches in London and Paris, with a competent personnel in charge. In Paris the municipal council has presented the union with a valuable building site, conveniently located, on which it is planned to erect a maison des etudiants. In London the offices have been obtained in the same building with the Universities Bureau of the British Empire, where also may be found the Office National des Universités et Écoles Françaises. The offices of the union in Rome has been discontinued and its interests turned over to the director of the American Academy in Rome.

CITY SCHOOLS.

CITIES RETARDED WITH THEIR BUILDING PROGRAMS.

Because of the fact that all the resources of the country were mobilized to win the war, the restrictions in the use of building materials being particularly rigid, the erection of school buildings almost completely stopped during the war. City systems now find

themselves seriously handicapped because of crowded buildings; in consequence they are faced not only with the problem of housing the normal growth, but with the necessity, as well, of providing accommodations for a cumulative growth of from four to six years.

Undoubtedly one of the direct results of the war has been to develop and confirm the faith of the people in education and to impress upon their minds that the schools of the country can be made to render an invaluable service. A renaissance of interest in education is taking place; in consequence of which the people generally are responding with commendable earnestness to the needs of the schools. Bonds for large sums in the aggregate have been issued in many cities, and there is scarcely an instance to be found since the period of the war where bond issues for school-building purposes have not been approved by the voters. Owing, however, to interest rates which money is able to command in the markets of the country, cities which have authorized bond issues for building and other purposes are experiencing difficulty in disposing of their issues without large sacrifices, adding thereby materially to the cost of construction. School bonds which prior to the war were looked upon as a desirable form of investment now go begging even at prices which would net the investor 6 per cent interest or even more. Some States are fortunate enough to have made provision for this exigency in their laws through making it possible for certain State funds of permanent character to be invested in school bonds. Most of the States, however, have no such provision, consequently most cities find themselves without any means of relief in this matter except through the usual appeal to the bond market. Although this is a serious difficulty operating to increase building cost greatly, the situation will be rectified as conditions become more nearly normal, and bond buyers will again find in issues for school construction an attractive investment.

COST OF SCHOOL-BUILDING CONSTRUCTION.

The past 25 or 30 years have witnessed a complete transformation in school-building construction. Cheap unsubstantial buildings with small capacity, planned with little thought of health or convenience, without regard to esthetic considerations, and poorly equipped, have given way to the modern fireproof structure built of the most substantial materials and equipped with every device for conserving health that science can suggest. With this shift in type the cost has risen enormously. Buildings of this character are now costing from $14,000 to $16,000 per standard classroom unit. This unprecedented cost, however, is largely accounted for by the enormous advance in the cost of labor and of building materials during the war period. Indeed, the general level of advance in the cost of school buildings

over the prewar level has been fixed at 200 per cent, the conclusion reached by Burgess after a careful study just completed of the trend of school-building costs.[1]

In figuring building costs, to this estimated advance of 200 per cent over prewar costs must be added the discount which school boards must accept in order to market their bonds. Thus an aggregate is reached so large as to cause many communities to seek relief, during this period of readjustment, through expedients of temporary character.

THE SEMIPERMANENT TYPE OF SCHOOL BUILDING.

In many cases old buildings are renovated and remodeled to make them usable for a few years longer at least. In other cases portable rooms and buildings are erected to house the children until conditions become such that permanent buildings of modern character can be constructed. Several milling firms have developed types of portable school buildings which can be set up in units and provide at a fraction of the expense of a permanent building a more or less satisfactory substitute. Still other places are experimenting with a type of building modeled after the factory building which is put up very rapidly and in units as needed. Indeed, it is probable that many school authorities may arrive at the opinion that this type of building of a semipermanent character, costing very much less than a permanent structure, may, indeed, be best adapted to conditions in rapidly growing cities where oftentimes populations shift so within a period of a few years as to render the erection of a building of a permanent character a doubtful procedure.

It is reported that the school authorities of Minneapolis have developed a type of semipermanent sectional schoolhouses which, in every respect except in being fireproof, is equal to a permanent building. Provision is made for hot-water heating; for ventilating, automatic temperature, and humidity control; and for adequate toilet facilities. It can be expanded from one or two rooms to 20 rooms or more as desired. While the building is portable, it will last for 25 years, it is asserted. Experiments with buildings of the semipermanent type have not been extensive enough to justify positive conclusions, but, without doubt, school boards and architects will seriously consider whether it is wise to erect the permanent type of school building that now costs from $14,000 to $16,000 per class room-unit and a type, too, so rigid and inflexible that changes to meet new conditions as they arise are impossible.

[1] W. Randolph Burgess, Trend of School Costs, Russell Sage Foundation, New York City, 1920.

Still other cities, either in all of their schools or in part, are organizing the pupils into half-day shifts—one-half attending school in the forenoon, the other half in the afternoon. A number of modifications of part-time attendance have been worked out, but all are of doubtful value, for in the end they rest upon a makeshift arrangement which does not fully make up to the child what he loses because of lack of sufficient housing accommodations.

This building exigency is giving an impetus to still another type of school organization—that known as the work-study-play plan, the plan of organization which has been most prominently brought to the attention of the public through the work of Supt. William Wirt, of Gary, Ind.

WORK-STUDY-PLAY PLAN OF SCHOOL ORGANIZATION.

According to this plan of organization the grades of a school are divided longitudinally into two parts, each having the same number of classes or grades. The first half, for example, is assigned at a given time, say in the morning, to regular academic work in the classroom, while the other half, at the same time, is divided up among certain special activities which can be conducted without the use of the traditional classroom, as, for example, activities centering about the auditorium, activities held in connection with the playground, likewise activities having to do with shops, laboratories, and drawing and music rooms. That is to say, while one-half of the school is carrying forward its regular academic activities during a given period, the other half of the school is divided up among auditorium activities, playground activities, and shop and special room activities. At the end of a designated period a shift is made; the children are called into the regular classrooms, from these special activities, and those who have just completed their work for the time being in the regular classrooms are distributed among the special activities. The daily program is so arranged that a rotation of activities is secured whereby intensive study in academic subjects is relieved from time to time by the special activities, the playground at one time, the auditorium at another time, shop and laboratory and music and drawing at still another.

HOW THIS PLAN RELIEVES CONGESTION.

It is obvious that this plan of organization requires only half the number of regular classrooms required by the traditional form of school organization. It should be added, however, that while a saving of 50 per cent in the number of regularly equipped classrooms is effected, offsetting this an auditorium must be provided, ample playground space for out-of-door activities must be at hand, and

also provision for certain special rooms such as shops and laboratories must be made. It is now generally recognized, however, that in every modern school plant, even organized on the traditional basis, there must be an auditorium, there must be ample playground space, and there must be shops and laboratories. Comparing, then, the work-study-play plan of organization with a modern school plant fully equipped, it is clear that it will save the expense of half the number of regularly equipped school classrooms.

Comparing it with a school plant of the traditional type, which does not have an auditorium and special rooms for shop and laboratory, the saving in expense is in the fact that it costs less to provide an auditorium and the necessary shops and laboratories for these special activities than to provide the number of fully-equipped classrooms required under the traditional plan. In either case, then, the work-study-play plan of school organization effects a distinct economy in building and equipment. This is one reason, then, that at this time in particular school authorities are examining this type of school organization with an interest never before displayed.

EDUCATIONAL VALUE OF THE WORK-STUDY-PLAY PLAN.

However, no plan of school organization is justified merely because it is cheap, for what the American public wants first of all is the assurance that its children shall have an opportunity to secure their education in ways which are pedagogically sound and effective. The work-study-play plan of school organization, if it had no merit other than mere economy, would not deserve serious consideration. However, happily it combines both economy and pedagogical efficiency.

On the educational side those who have had experience with this form of organization are nearly a unit in claiming for it the following advantages:

1. It keeps every part of the school plant working full time.
2. It provides a flexible program of study, making it possible for each community to adapt the program to its particular needs.
3. It is so flexible that it is easy to make provision for the individual needs of pupils.
4. It provides opportunity for healthful work and play and study, thus giving back to the child what city conditions of living have taken away from him in opportunities particularly for work and play.
5. It gives the pupil a large measure of freedom and permits many opportunities for the exercise of initiative and the training of judgment.

A thoughtful examination of the foregoing advantages urged as characteristic of the work-study-play plan of organization discloses

the fact that no advantage is adduced except perhaps the first, which can not be secured in schools organized on the traditional basis, assuming, of course, that such schools have made provision for playgrounds, auditoriums, swimming pools, shops, and laboratories. This, however, seems clear, that this plan of school organization is a form of organization which makes definite provision in its program for types of activity which in most schools of the traditional type are usually incidental, spasmodic, and not an integral part of school procedure. Indeed, the plan has been evolved for the express purpose of making such activities an essential part of the work. Furthermore, it must be obvious that opportunities and advantages of an all-around education of this character can be secured by this plan of organization at a greatly reduced cost as compared with securing the same results under the traditional plan of organization. Passaic, N. J., for example, reports the per capita cost per student-hour for pupils in the traditional schools to be $0.045, while for those in the schools organized on the work-study-play basis the cost is $0.034 per student-hour. On grounds, then, of economy and of pedagogical soundness, it may confidently be expected that this type of school organization will be given increasing consideration.

SCHOOL CONSOLIDATION MOVEMENT IN CITIES.

This period of the enforced cessation of school construction, while it has caused a piling up of pupils which is embarrassing, nevertheless has not been without a distinct advantage in one particular at least. For school boards, forced to go to the people for large bond issues, have in a number of instances recognized that in submitting their building programs this is an opportune time to make a thoroughgoing reorganization of their buildings. In many of the older cities of the country, particularly of the East, buildings erected 50 years ago are small, are badly situated in respect to population groups, and are without modern facilities.

The necessity of going to the people with bond issues for relatively large amounts is providing the opportunity for a proposal to consolidate many of these small attendance districts, selling, in instances, the properties and buying plats at better situations and erecting thereon large buildings of modern type. Curiously enough, there is as much of a need in many of our older cities for organizing consolidated schools as there is in rural communities. Many boards are seizing this opportunity and are entering upon a comprehensive building plan which will put their school systems in this respect on a modern basis.

TEACHERS' SALARIES.

In response to the rapidly rising curve of living expense, resulting in lowering the purchasing power of a dollar to 50 cents, or to 44 according to some authorities, boards of city schools very generally throughout the country have made substantial advances in salaries paid to the teaching staff and to other school employees. Owing to the fact that budgets have to be prepared in advance and having once been adopted by tax-levying authorities can not usually be changed during the current fiscal year, the increase in salaries has lagged far behind increases in living cost. In consequence, many of the most capable teachers withdrew from the teaching profession, temporarily at least, and entered other vocations which were able to respond more quickly. The current, too, of young people entering teacher-training institutions was likewise diverted to other and more remunerative occupations. For a time the schools of the country were in a serious predicament, from which, it is to be noted, they have not yet fully recovered. Indeed, so serious did this situation become that nation-wide campaigns of publicity were entered upon, serving to accelerate the readjustment of salary schedules.

Despite these efforts, however, in the cases of certain cities the teaching body itself, chafing under delays and hard pressed by economic conditions, took matters into its own hands, and teacher strikes occurred for the first time in the history of public-school systems of this country. In other instances the teaching corps itself raised funds, organized itself for publicity work, and deliberately set about educating the taxpayers of the community as to the facts of the situation, and without resorting to radical measures was able to secure a measure of relief.

During the five-year period now closing a range of salary advance from a third to a half of that paid at the beginning of the period will include the great bulk of the cities of the United States. This advance by no means makes up to the teachers the loss they have suffered through the decline in the purchasing power of their salaries. Burgess's study,[2] indeed, shows that the teacher's salary now, despite the advances that have been made, is actually less in purchasing value than at any other time since the Civil War. Nevertheless, serious efforts have been made to lessen the discrepancy. The conscience of the people, as never before, has been touched respecting the work and economic status of the teacher. Without doubt when a decline in living costs sets in, as it now bids fair to do, and conditions become more nearly normal, the teachers of the country will find that they

[2] W. Randolph Burgess, Trend of School Costs, Russell Sage Foundation, New York City, 1920.

will have made a distinct gain, and that their status financially, as well as in other important respects, will have been greatly bettered.

THE TEACHER SHORTAGE.

Although there is still a teacher shortage, without question the tide drift is setting back toward the teaching profession. For some time to come some localities may have difficulty in securing as many teachers as they desire of the type they prefer, but already the more favored localities are reporting a surplus. Furthermore, it is to be noted that in all periods of rapid expansion, when new activities are springing up, calling without much discrimination for help of all kinds and in a position to pay salaries considerably above those which the more stabilized professions and occupations pay, it is natural that the latter should suffer. On the other hand, when expansion ceases and contraction sets in, and when new activities shut down, it will always be found that the stabilized occupations and professions will be swamped with persons seeking employment. So, although the schools have suffered in this respect during the past five-year period, nevertheless to the mind which recognized that the period of abnormal expansion would be followed by a period of contraction the situation had nothing in it to cause alarm.

Fortunately the good sense of school authorities prevented them from becoming panicky in the situation, which might have resulted in the wholesale lowering of standards of teacher qualification and training. To an unexpected and commendable degree the schools of the country held out stoutly for the maintenance of prewar standards in these particulars, and, indeed, definite efforts have been made to raise these standards in the belief that high standards with compensating salaries would attract the most capable persons. Moreover, it was definitely asserted that because public attention is focused more sharply on this problem now than ever before this is the golden opportunity for making the profession what it ought to be, and that, instead of letting down the bars, much thought should be given to means for making the teaching profession permanently attractive to persons of marked ability. A good expression of this point of view is to be found in the following resolution, adopted by the city school division of the National Citizens' Conference on Education, which convened at Washington in May, called by the Commissioner of Education:

1. The interests of the Nation and the welfare of its children require the creation of a body of thoroughly prepared professional teachers sufficient in numbers so that every American schoolroom shall have in it a competent teacher. * * *

2. For this supply of professionally prepared teachers for the public schools, the Nation must, and should, depend upon the normal schools (they should be named and at once made, in fact, teachers' colleges) to attract a sufficient number of young men and women of the best quality to prepare for duty in all grades of the Nation's public schools. * * *

3. The appropriation for teacher-preparing schools must be largely increased. * * *

To secure sufficient revenues for carrying out such a program for the preparation of teachers, requiring an expenditure two or three times as great as at present, it will be necessary that the Federal Government come to the aid of the State in the support of these schools.

TEACHER PARTICIPATION IN SCHOOL ADMINISTRATION.

Another by-product, to a degree the result of the analysis of school conditions which was made and the efforts to meet the problem of teacher shortage which followed, is the pretty general recognition of the fact that school administrators must devise means whereby the rank and file of the teaching corps shall have a voice in the discussion of school policies. The creating of teachers' councils, the organizing of teachers' unions, the more radical demands in some quarters that the teaching body have direct representation on the board of education, and that the question of the retention or dismissal of the superintendent of schools shall be submitted at stated intervals to a vote of the teaching staff, indicate a rising tide of opinion which undoubtedly will modify materially the relationship existing between boards of education and the superintendent of schools, on the one hand, and the teaching corps, on the other. This new note in school administration was likewise voiced in the city school division of the National Citizens' Conference on Education, as is witnessed by the resolution which follows:

The attitude of the board of education and of its chief executive officers toward the teaching staff should be such that, while preserving inviolate their authority to make final decisions, it, nevertheless, encourages to the utmost the exercise of both the individual and collective initiative of the teaching staff, for in no other way can systems of schools be prevented from becoming unduly autocratic and therefore static and ineffective.

RESEGMENTATION OF THE SCHOOL SYSTEM.

The movement among city school systems looking toward a resegmentation of the chief divisions of the public-school system, which began in 1909 with the first attempt to reorganize a school system on the basis of the 6–3–3 grouping plan of grades, has gathered momentum with the passing years. Now, 10 years later, official reports made to the Bureau of Education for the year 1917–18, show the following impressive facts as to the number of city school sys-

tems which have reorganized their systems in part or in whole to provide for a junior high-school segment:

Statistics of junior high schools (1917–18).

Cities grouped by population.	Number reporting junior high schools.	Total number of such schools.	Total number of teachers.	Total enrollment.
Group I (100,000 and over)	17	76	1,821	51,031
Group II (30,000 to 100,000)	38	90	1,355	35,782
Group III (10,000 to 30,000)	68	93	1,066	33,108
Group IV (5,000 to 10,000)	99	102	875	26,824
Group V (2,500 to 5,000)	70	70	428	11,363
Total	292	431	5,545	158,108

It should be added that the movement is by no means confined to the cities, for many rural and small village communities report the organization of junior high schools.

In some of the States difficulty is experienced in effecting such reorganization because the laws defining elementary and secondary education and prescribing curricula and textbooks are so drawn that the junior high-school organization is impracticable. In fully 75 per cent of the States, however, no legal difficulties obtain, and in these the resegmentation to admit of the junior high-school unit is proceeding rapidly. While official reports are thus seen to indicate a growth of the movement of unprecedented rapidity, nevertheless it must be said that a number of the cities reporting junior high schools have gone no further than to adopt the junior high-school form of organization. If such cities stop merely with an outward resegmentation of their systems they will miss a great and much-needed opportunity for radically changing the character and content of courses of study and the entire spirit of dealing with the child of adolescent years.

EXTENDING THE HIGH SCHOOL UPWARD.

Within a year of the reorganization of the first school system of this country on a junior high-school basis (Berkeley, Calif., 1909), another California city (Fresno, 1910) extended its four-year high-school course upward to include the first two years of college work. Three years before, California had passed an act which permitted this extension. Within four years 10 such schools, or "junior colleges," were established in the State; recent reports indicate that there are now more than 20 school systems in California which have made this extension upward in at least one of their high schools. So also, Illinois, Michigan, Minnesota, Iowa, Idaho, Indiana, Missouri, Texas, and Washington report one or more public high schools in

each so organized. With the single exception of Newark, N. J., the East has as yet made no response to the idea.

In the States just mentioned these schools are supported by tuition and by local taxation. In California, however, no tuition fees are required, as the State provides aid to supplement local taxation.

This movement creating public junior colleges and making them integral parts of the public-school system has sprung up in response to the demand that educational opportunity be brought close to the people in order that every young person may have the chance to carry his training as far forward as his will and his ability permit. More and more the people are demanding for their children that opportunity shall be provided for securing at least the first two years of college work without having to send their children long distances from home.

While it is thoroughly impracticable for every high school to attempt the beginnings of college work, nevertheless in the larger centers easily accessible to both urban and rural high schools it may confidently be expected that the public junior college will increasingly find favor.[3]

TENDENCIES IN PRIMARY EDUCATION.

Grading the child according to his ability.—The two extremes, the retarded pupil and the very bright pupil, have received a major share of consideration during the last two years from educators who are working on problems in primary education in psychological clinics and departments of research in city school systems. Several books have been written and numerous articles have appeared in current magazines bearing upon this subject.

Attempts are made to measure these children by a new standard. Heretofore the child's accomplishment in the subject of reading for the first year of his school life has been the unit of measurement in most schools in the United States. If he could read a page of the first reader at the end of the first year he was promoted. If he stumbled through the reading exercises, was unable to call all the words, and hesitated before certain words and phrases, he was accounted a failure and was required to take the work over. He reentered the school the second year where he began the year before and dragged his weary spirit through a repetition of the successes and failures of his first year's experience.

Retardation never yet brightened a child's intellect. It has a tendency, on the contrary, to benumb his faculties and to inhibit those natural abilities with which he has been endowed.

[3] For a detailed and valuable study of various types of junior colleges, recently made, see F. M. McDowell, The Junior College, Bureau of Education Bulletin, 1919, No. 35, Government Printing Office, Washington, D. C.

The appalling percentage of retardation in the first grade, about one pupil in four being counted out at the end of the year as a failure, has aroused the thinking educator to the lack of efficiency in this method of early education.

Attention has at last been turned from methods of teaching reading to the child himself, to ascertain why he fails and in what way he differs from his classmates who have passed on to a higher grade and have left him stranded. It is proposed to take a simple measure of his mental ability, usually by some modification of the Binet scale, and then attempt to adapt the course of study and the methods of teaching to his particular type of competency.

Many city school systems have begun this important reorganization of primary education and many more are about to undertake it. Providence, R. I., is one of the former, and Detroit, Mich., one of the latter. The plan for Detroit is similar to that tried in most cities. The children of the first grade, by means of a group test, are classified, tentatively, into three divisions, X, Y, and Z, the X group being made up of the brightest pupils and Z of the dullest. The present course of study is to be used for the Y group, a richer course will be developed for the X group, and minimum essentials only will be given to the Z group. To judge from the reports from Providence this system has made a reformation in the grades where it has been tried. Practically under this régime all the pupils are promoted, the bright pupils do not become impatient and idle. classes are uniform in ability and responsiveness, and disciplinary problems are eliminated.

The child with the unusually good endowment has suffered as much in the primary treadmill as the child who is retarded. It seems apparent, even to a casual observer, that his measure of accomplishment should not be judged by the same standard applied to the "failure" or even to the average pupil. The very bright child will learn to read and write and cipher, willy-nilly, given the least opportunity, and there is no power that can stop him. How he must fret and chafe under the restrictions that are imposed upon him by the slower mental processes of his classmates! He is quicker, more alert, and more intelligent than the ordinary child. His measure of competency should be ascertained, and he should be given the appropriate stimuli in his public-school course which shall train his superior ability.

The first grade has since its establishment been a clearing house wherein a child has found his level by a standard wholly outside of himself and unrelated to his particular endowment. Under this recent scientific treatment the pupil in the first grade obtains the right to find himself and to develop all his capabilities unrestricted by those

above him and undeterred by those below him in the scale of mental equipment.

THE CURRICULUM.

Basing courses of study and subject matter upon the child's experience.—Much is said regarding the child's experience as a potent factor in the primary curriculum, but universally it is ignored in the primary courses of study and in the average schoolroom practice. The formal subjects of study still occupy the primary teacher's program, and drills and mechanical exercises receive most of her attention. A certain number of pages of the reading book, of combinations in number, of families in phonic drills are still the level of accomplishment for the first-grade child in the average city public-school system.

The committee on materials of education of the National Society for the Study of Education have issued a series of reading lessons for first-grade pupils which are based directly upon some phase of community life which they have recently observed.[1] One series is a report of a trip to the Rock County Fair, in Janesville, Wis., which was formulated into reading lessons during the regular reading period by the pupils of that city. The sentences are grouped under three heads, as follows:

THE FAIR.

We went to the fair.
We saw some cattle.
We saw some kewpie dolls.
We threw some balls to get them.
We saw an aeroplane.
It did tricks up in the sky.

ICE CREAM CONES.

We saw some ice cream cones.
A man sold them.
We bought some.
They cost 10 cents.
The ice cream cones were good.
We like them.

THE HAND ORGAN.

We saw a man and a monkey.
The man had a hand organ.
It made music.
The monkey danced.
We gave the monkey a penny.
He put it in his pocket.
He made us laugh.

[1] Nineteenth Yearbook, Dr. C. H. Judd, Chicago University, chairman.

"These exercises," the writer affirms, "have the advantage of drawing on a familiar but relatively diversified oral vocabulary and at the same time the pupils, recognizing the sentences as the result of their own authorship, pass readily from oral speech to reading." The teacher of these children is convinced that the pupils grasp these sentences very quickly because of the vivid experiences which lie behind them.

From St. Louis a series of reading lessons are reported that were developed from the children's community experiences after viewing a pageant, a balloon race, and a flag presentation, and after listening to a talk on fire prevention by a visiting fireman in their vicinity.

An imaginary visit to a farm served as a basis for one of these reading lessons in the first grade at Lakewood, Ohio. The subject of "Bubbles," after a soap-bubble blowing contest; of "Jack-o'-lanterns," following the pupil's Hallowe'en experiences; of "Making Lakewood Safe," in connection with the city's "Safety First" campaign; and the lines of the old familiar song, "This is the Mother," furnished most appropriate material for motivated reading lessons of this kind.

Reading lessons for children in non-English-speaking families.—Another series of reading lessons for those children who are struggling to learn the English language, both oral and written, is given by this committee as better material for this work than that supplied "in the ordinary America primers." These lessons are also based upon the child's experience, in the home principally, and cover many activities with which he is especially familiar. Setting the table, taking care of the baby, bathing and dressing, washing, sweeping, dusting, and baking are some of the subjects that have been developed in these early reading lessons, as well as sports and games like playing ball, jumping rope, flying kites, coasting, and playing with dolls. A series on pets under the subjects of "Kitty" and "Chickens" is also included, and many lessons on patriotism are taught to these little aliens in the series on "Thanksgiving" and "Flag Day." The following examples taken from 400 of these short simple sentences will give some idea of the form and scope:

LESSON 53.

I get the broom and dustpan.
I take them into the bedroom.
I open the window.
I move the bed and the dresser.
I sweep the floor clean.
I put the broom and dustpan away.

FLAG DAY.

This is flag day.
Our flag is red, white, and blue.
It has thirteen stripes.
It has seven red stripes.
It has six white stripes.
It has many white stars.
George Washington loved the flag.
Abraham Lincoln loved the flag.
We love the flag.
It tells us to be good, brave, and true.

Rochester, N. Y., has made this valuable contribution to a phase of primary education which presents grave difficulties for the first-grade teacher, who will welcome these pertinent suggestions at a time when there is a dearth of material on this subject.

Projects which relate to the child's civic interests.—Every effort is made in many localities to incorporate into revised curricula, as larger units of study, those materials in civics, history, and geography which appeal to the child's interest because of their relation to his own immediate environment. In some of the cotton-mill villages of the South the child's daily program in school is centered around the activities of the mill community, which offer many opportunities for the application of those principles of education he is acquiring through the more formal subjects of study.

The subject of cotton, its growth and manufacture, find a place in these courses of study. The village store, its produce, their sources and preparation for market, with transportation and use, form an interesting unit of study. The buildings in the village, the community dairy and piggery, the community garden, and the child's own home garden have been incorporated into the course of study as topics of peculiar interest to the children in these schools.

From the West, the East, the North, and South reports are coming in of studies made in many localities which indicate a decided tendency in this direction. The Bay City, Mich., schools have written a book on the history of Bay County, past and present, which is given in detail in the report of the committee on materials of education. "Real Stories from Baltimore County" is another valuable study of environment made by the schools in that section of the country. "Indians of the Maumee Valley" is a similar contribution growing out of a study by the third grade in the training school at Bowling Green, Ohio, also reported by this committee. "The Live Stock Industry in Nebraska" represents a State-wide interest as written by the pupils of the Omaha schools, and a study of the "Geography of Superior" by the schools of that city in Wisconsin is also included in this report. A booklet from Decatur, Ill., entitled "The City of

Decatur," has been issued by the schools of that city. It was written, illustrated, and bound by the pupils in the elementary grades of that school and is a most artistic and suggestive contribution to materials of this kind.

Primary education in the school survey.—A survey of primary education in a few city school systems has been undertaken by the Bureau of Education during the past two years. In estimating the work of these grades the survey committee have secured their data in two ways—by observation and stenographic reports of actual schoolroom practice, and by findings derived from the standard educational tests in the formal subjects of study.

More than an estimate of the work, however, has been attempted in these surveys. An effort has been made, given a certain effect, to trace back to its source, if possible, the cause of conditions as they are found to exist and to suggest measures for rectifying them. There is, undoubtedly, a decided similarity in the work of the schools of the South and North and those of the East and West. Each primary school survey reports virtually the same condition and suggests a like revision, in each case, of the present course of study, with corresponding changes for each school in methods of instruction which shall be more in harmony with modern movements in education.

One outstanding fact in each survey demands attention and calls for reform in present primary procedure; for it has been found by these investigations that the average primary teacher, through lack of training or study, profits little by the campaigns conducted in State and national associations and in educational periodicals for a larger freedom for the child, a more elastic program, and greater adaptation of the work of the school to the needs of the children under its care.

Routine is still omnipresent. It holds the teacher, as of old, to the accomplishment of a single purpose, the abstract drill in a mechanical exercise from a formal subject of study.

Work of the committees of the National Council of Primary Education.—Two lines of work have occupied the Primary Council during the past two years, one to determine by a consensus of opinion what is understood as an acceptable day's work in the primary grades, and the other, what may constitute the suitable furnishings and equipment for the primary schoolroom. Observations have been made and reported, questionnaires sent out to many primary workers, and much correspondence has been devoted to these questions, and reports of findings have been issued in the form of Bureau of Education bulletins.

One free period, at least, for each day and for each child has been advocated in which the pupil may select any activity he likes and

occupy the time of this period as his inclination may suggest. A superintendent who has acted upon the suggestion of the committee in this regard testifies as follows:

An observer can not help but notice a difference in the atmosphere of the room. There is greater freedom at all times. The children have gained sufficient self-control during the free period so that more liberty is allowed during the quiet periods. There is consequently less restlessness. The atmosphere is more democratic, as petty troubles are referred to the children to settle. The children are more natural at all times and have a happy emotional attitude toward their school.

In the matter of furnishings the movable desk has been recommended, an outside porch for each room, cupboards not higher than 5 feet, a storeroom, the classroom lined with books, display boards, and shelves for books and treasures. All reports are so far tentative, but will eventually lead to a standardization of equipment in the primary grades.

KINDERGARTEN EDUCATION.

EXTENSION WORK.

The education department of the General Federation of Women's Clubs has begun a campaign which has as its object a kindergarten in every elementary school in the United States. The subject of kindergarten extension was presented at two sessions of the biennial meeting in Des Moines, June, 1920. A kindergarten chairman has been appointed in each State who will cooperate with the kindergarten chairman of the General Federation in making a State survey of kindergarten conditions. The subject of kindergarten extension is to be a part of the program of each State meeting.

An intensive campaign is being carried on in North Dakota by the State kindergarten chairman. The names of organizations and individuals interested in kindergarten extension are secured through the cooperation of county superintendents; presidents of local clubs are then to form a kindergarten committee to cooperate with the county superintendent. In this way it is expected that public interest will be aroused, and petitions, with the required number of signatures requesting the establishment of kindergartens, will be presented to local school boards. Local club presidents are including the subject of kindergarten education in their yearly programs. When it is not possible to secure a speaker, a lecture with accompanying lantern slides, provided by the kindergarten division of the Bureau of Education, is presented.

The formation of State kindergarten associations, provided for by an amendment to the constitution of the International Kindergarten

Union, is proving another means of coordinating kindergarten interests in the several States. Indiana has formed a State organization, and Michigan, New York, and Wisconsin have tentative organizations on a State-wide basis. Ohio has had a State organization for a number of years and is carrying on a vigorous campaign for more kindergartens under the slogan, "First aid to the uninjured!"

Virginia at its State Teachers' Association meeting in Richmond passed a resolution dissolving the separate kindergarten and elementary sections and established in their stead an organization "which shall have as its aim the education of children from 4 to 8 years of age." Virginia has just included permissive kindergarten legislation in her new State code.

The New York State Association is working for the passage of a mandatory-on-petition kindergarten bill. Illinois is also organized for progressive kindergarten legislation, and Washington is carrying on an educational campaign under the auspices of the State normal school. The Louisville (Ky.) Kindergarten Association is planning a State campaign.

As a result of the activities of the Baltimore (Md.) Kindergarten Club, the board of education of that city has made provision for 10 new kindergartens in the public schools, and a preprimary training department has been established in the Baltimore Teachers' Training School.

KINDERGARTENS IN TOWNS AND VILLAGES.

While the statistics of 1917–18 showed a large increase in the number of kindergartens in towns under 2,500 population, the need for further extension of the kindergarten in the rural districts has been recognized in a number of States. A campaign to reach rural communities has been organized in Texas. That this campaign is in relation to a real need is evidenced by letters received by the kindergarten division of the Bureau of Education. A mother in Texas writes:

> Please do not forget the rural schools in this movement. I have just read in the Dallas Times-Herald where you are launching a movement for better kindergarten work in Texas, and I want to wish you godspeed. I am a country mother with two small sons, and I have a horror of putting them in a school, knowing they will have to sit on a seat from 8 a. m. until 4 p. m. with perhaps two or three 10-minute reading lessons and maybe a little number work. I believe every rural school should have a kindergarten teacher. They might combine kindergarten and first-grade work.

A teacher in a Maryland country community writes as follows:

> We are in great need of a kindergarten here in this town. Many children are solitary little ones from isolated small farms and country homes and need badly the socializing influence of the kindergarten and supervised work and play. They have few toys and no books in the homes, and we do the best we

can during their first and second grades to have the play spirit, but with our course to cover and 78 little ones in the first and second grades it is about impossible.

A county superintendent in North Dakota writes:

In our consolidated school I can see my way clear to recommend strongly the installation of kindergartens. In this county there are about 600 children who should receive the benefit of kindergarten training. So far as I know, there has been only one attempt made at this work in this county, and that was a private kindergarten in which I had my two little youngsters enrolled. This is a work that the public in general has had very little time to consider so far, but I keenly feel the great necessity for vigorous and determined action along this line of work.

In Lufkin, Tex., a small group of club women solved the problem of securing a kindergarten by collecting $1 for each inhabitant and building a beautiful little bungalow, which was presented to the board of education, and the town had a kindergarten.

A kindergarten primary course is given at the Chico (Calif.) Normal School, with special emphasis upon training teachers in rural schools to meet the needs of the younger children. The fact that all of the State normal schools of Texas have opened kindergarten training departments gives promise of enough trained kindergarten teachers for the towns and villages that open new kindergartens.

AMERICANIZATION.

The impetus given by the war to all phases of Americanization work has brought about a new appreciation of the social value of the kindergarten. A letter from Berkeley, Calif., gives this testimony:

When war was declared a few extremely patriotic women with exceptional vision conceived the idea of organizing the women of Berkeley under the Army plan for all kinds of war service. When the armistice was signed these women refused to be demobilized. They had learned to labor together, and they loved it; consequently, we simply changed our program from war to peace. Americanization of ourselves as well as our foreign born is our motive. Our first bit of work came last summer. One of our canning factories, employing between 300 and 400 foreign women, presented an ideal situation for Americanization. Many of these women could not work in the factory because they had small children. The factory people needed the labor, so they set aside one room in a vacant house and put the factory nurse in charge. The matter was reported to us and we saw our opportunity. We visited the place one day and the next morning at 9 o'clock we opened a first-class kindergarten with a trained and experienced teacher in charge of 73 children ranging in ages from 3 to 12. We borrowed the furniture from the school department, bought several yards of burlap, and put up many educational pictures. In three or four days we had a party for the children and invited the mothers to come in and see for themselves. We decorated with flowers and more flowers—even the little dirty dresses and coats were made beautiful with bouquets of sweet peas. Their little faces were the cleanest they had been in a long time, and, oh, so happy

when the storyteller told something funny! The mothers were equally happy, even if their aprons were all dirty and stained with fruit.

Sidney L. Gulick, who has given much study to the Japanese problem on our Pacific coast and in Hawaii, says:

To my mind the most important thing is to have kindergartens for Japanese children between 4 and 6 years of age, when the children can really learn English without any effort whatever, and the impressions and ideas derived from patriotic kindergarten teachers would have an enormous influence in making good citizens of these thousands upon thousands of Japanese children who will have little opportunity of associating with American children and thus of becoming really Americanized. I believe the importance of having kindergartens for Japanese children can hardly be exaggerated.

The kindergarten teachers in the public-school kindergartens of Pittsburgh have done such effective work in home visiting that their services are to be employed as school visitors in the homes of the children in the grades as well as in the homes of the kindergarten children. This social work is made the basis upon which the kindergarten teachers receive the same salary as the teachers of the elementary grades.

A kindergarten teacher has recently been appointed as director of immigrant education in Springfield. The peculiar fitness of women with kindergarten training and experience to do this type of work has already been recognized in Chicago, Ill., and Washington, D. C., where kindergarten teachers have been made directors of Americanization work in connection with the public schools.

The International Institute of the Young Women's Christian Association is a service bureau for the foreign born. In appreciation of the value of the kindergarten to the foreign mother, a kindergarten pamphlet has been prepared and published in 16 foreign languages. It explains in a simple, readable manner what the kindergarten does for the child and how it helps the mother. Through cooperation with the kindergarten division of the Bureau of Education this pamphlet has been widely distributed in cities throughout the country having a large foreign population. The practical work of the international institute is divided into two classes: Case work and group work. From Pittsburgh is sent this statement:

The group work is both educational and recreational in character, with a strong emphasis on the recreational side. In all group work, as far as possible, the idea of reciprocity is brought out and the fact that American culture is composed of contributions from all the world is emphasized. Groups are gathered from various sources, but it is felt that work with the groups formed in seven schools through the cooperation of the kindergartens will have a far-reaching result. Pittsburgh kindergarteners in the foreign districts of the city realize the immense difficulty of getting the foreign-born women to come to the mothers' meetings. The reluctance on the part of the foreign women is quite understandable. Inability to speak or to understand English, timidity in the presence of

the American mothers, often make the meeting anything but pleasurable. However, the kindergartens have met with a measure of success, but after the children leave kindergarten, the mothers practically never come in contact with the school.

THE KINDERGARTEN UNIT IN FRANCE.

The kindergarten unit in France brought joy to many French children at Christmas time when large Christmas trees were brought from Belgium and erected in the devastated villages of the Aisne where the unit has been carrying on its work. The children of Boston sent 1,500 dolls to their little French sisters.

As an outgrowth of the work in France, a kindergarten has been established in an orphanage for war orphans in Belgrade, Serbia.

The French Government has been convinced of the value of the educational methods of the American kindergarten teachers as well as of the value of their social work. A Jardin D'Enfants training department is to be opened in Sèvres College in October by the French Government. Mademoiselle Amieux, the president of the college, is heartily in sympathy with the aims and methods of kindergarten work and welcomes the incorporation of a kindergarten training department in this college for training teachers in France.

THE KINDERGARTEN AND THE HOME.

The Bureau of Education committee of the International Kindergarten Union is making a study of the curricula of women's colleges in order to determine what these institutions for higher education are doing to train young women for the responsibilities of home making and child training. To quote from the report of the chairman of the committee:

> The inquiry has hardly more than begun, but it is already apparent that a conception of fundamental importance in the preparation of young women for life is being ignored—that of the significance of the child in the home and to society, and the relation of women to its development and training. Many of the colleges whose curricula have been studied have well-equipped home economics departments, and offer admirable courses in dietetics, textiles, household management, and the several household arts. Practically none of these offer courses in that highest of arts—the directing of young lives into channels of right thinking and doing. The kindergarten training school has been almost alone among educational institutions in standing for the need of training for motherhood. Because of the experience of kindergarten graduates as to the value of such training, kindergartners feel that they have a contribution to make to the curricula of other institutions for the education of young women. To attempt to convert the women's college to this view may be an ambitious task, but it is one to which the committee in question is committed.

The University of Minnesota has recognized the importance of including child training as a part of home making by offering a course in

child training by a kindergarten specialist to the students of the home economics courses.

Two newspaper bulletins on kindergarten principles applied to the training of children in the home have been prepared by the kindergarten division of the Bureau of Education and have been widely distributed to newspapers throughout the country. Such topics as "Baby talk," "Common sense in managing children," "Children and their toys" have been treated by the foremost specialists in kindergarten education in the country with the purpose of helping mothers in the upbringing of their children in the complexity of modern life. The National Kindergarten Association has distributed weekly articles on the training of children to many magazines and newspapers throughout the country. The first series of articles has been published by the Bureau of Education as a bulletin entitled "Training Little Children." Copies for free distribution have been exhausted, indicating the wide demand on the part of parents for suggestions on training children in the home according to kindergarten principles.

THE KINDERGARTEN AND THE PRIMARY SCHOOL.

A more organic relation between the kindergarten and the elementary school has been brought about in a number of cities by employing teachers in the kindergarten and the first grade who have had training in both kindergarten and primary work. It is possible to secure the service of teachers with this training, because kindergarten-primary courses are being offered in many normal schools. Because of this training the kindergarten teacher understands the work of the grade for which her children are being prepared, and the primary teacher is able to build upon the work of the kindergarten. In a number of cities, among which are Denver, Colo.; Trenton, N. J.; and New York City, the kindergarten teacher passes on with her children into the first grade, alternating terms in the kindergarten and first grade. In this way a continuity in the work is established just as there is continuity between any other two grades in a school system.

Supervision of the kindergartens and primary grades by one who has had training and experience in both fields has also tended, in a number of cities, to unify the work of the first years of school life.

A kindergarten representative in the State department of education in Pennsylvania is to be appointed by the State superintendent, whose duties shall be the extension of kindergartens throughout the State and the unification of the work of the kindergarten and the primary school in those cities where kindergartens are already established.

SURVEYS RECOMMEND ESTABLISHMENT OF KINDERGARTENS.

A survey of education in Hawaii, made by the Bureau of Education, recognizes the valuable work being done by the Free Kindergarten and Children's Aid Association of Hawaii. The following statement occurs in the report:

Recently one of the members of the survey commission, visiting the public plantation school at Hamakuapoko, Maui, observed that the children of the class of beginners, made up almost entirely of orientals, were unusually responsive to the questions of their teacher, and replying in language of a much better quality than most beginning children on the plantations can command. Upon inquiry it was learned that the entire class had been training in a near-by kindergarten maintained privately by one of the plantation owners.

Largely in response to the excellent work done by the Free Kindergarten and Children's Aid Association of Hawaii, the Territorial legislature at its last session authorized the department of education to organize one kindergarten on each of the four principal islands. While this program has not yet been fully executed, as sufficient funds were not provided, nevertheless it is the first step in a plan which the commission sincerely hopes will lead, within a very short time, to the organization of a kindergarten in every school in the Territory. The commission is convinced, after a careful study of the conditions which obtain in the islands, that no more important single step in Americanizing the children of the foreign born can be taken than in the establishment of a kindergarten or kindergartens in every settlement in the Territory. In order to make such a project a success it will be necessary for the department to secure an efficient head to this work and to establish training courses under competent directors for the training of teachers for kindergarten work. In this connection the commission would recommend that the training of teachers for the kindergarten be made a part of the work of the educational department of the university, which the commission has recommended in another part of this chapter.

The survey commission which conducted a survey of the schools of Winchester, Mass., made a recommendation to increase the number of kindergartens so that all the children of Winchester might have the privilege of kindergarten training now enjoyed in only two of the elementary schools.

RURAL EDUCATION.

The rural schools of the country comprise a vast organization. Of the 20,853,516 children enrolled in the schools, 12,266,915 are in the rural schools, with an average daily attendance of 8,788,600, while the cities enroll only 8,586,601 and have an average daily attendance of 6,760,314. There are in the rural schools 80,100 men teachers and 329,000 women teachers. The average salaries of the rural teachers in 1918 was $479, while the average city teachers' salaries in the city was $854. By the latest reports the rural communities pay $24.13 each year per pupil enrolled, while the cities pay $40.60 for the same item. With this variation it can be seen that the problems of the

rural schools are more difficult of solution than those of the city schools.

The past year has been marked by certain definite problems in the rural schools. First was the problem of finding a sufficient number of teachers; second, the problem of financing the schools and, particularly, paying the salaries of rural teachers; third, the problem of adapting the rural schools to the needs of the pupils.

TEACHERS SHORTAGE.

An investigation in February, 1920, brought to light the fact that State school officials reported 18,279 schools closed because of lack of teachers and 41,900 schools taught by teachers characterized as "the low standard, but taken on temporarily in emergency." The largest shortages were reported as follows: Kentucky, 2,250; Texas, 2,055; Virginia, 2,000; Georgia, 1,500; North Carolina, 700; Iowa, 600.

Substandard teachers were reported as follows: Texas, 400; Virginia, 3,500; Alabama, 3,500; Georgia, 3,000; Tennessee, 3,000; Minnesota, 1,880; Illinois, 1,200; Kentucky, 11,000; New York, 11,000; South Carolina, 1,000.

These closed schools and substandard teachers were for the most part found in rural communities, as the cities were better able to raise salaries and offer extra inducements to retain good teachers.

One hundred and ninety State, county, city, and private normal schools reported 11,503 fewer students than they had the year previous to the war. The schools reporting represent 60 per cent of the total normal schools, and on this basis it is estimated that there were 19,000 fewer normal students and 7,000 fewer graduates from normal schools in 1920. Teachers' training courses in college show the same falling off, and the loss of students in some State normals report a shrinkage in students of 25, 30, and as high as 50 per cent.

The opportunities in the commercial world under the new economic conditions make it impossible to hold teachers without additional inducements. Plans were taken in various States to arouse public sentiment in regard to this question, and the governors of Ohio, Indiana, Iowa, Nevada, and a number of other States set aside certain weeks as "education week." In these campaigns every effort was made to emphasize the importance of education and to show the true condition relative to the teacher emergency.

Fourteen States reported that there is a general interest in the movement to pay teachers better salaries. Three States reported an increase of 10 to 20 per cent; one State, 40 per cent; three States, 25 per cent; and three States, 50 per cent. This increase, however, was based on a very low previous salary and does not represent in many cases an adequate living salary.

The percentage of men teachers has been decreasing rapidly, until in 1918 only one teacher in six was a man, and these men were found largely in city schools. Connecticut reports no men in the rural schools.

The situation with regard to high-school teachers has been shown to be especially urgent. Seven thousand high schools, employing 65,857 teachers, report that they will require 17,275 new teachers in September to provide for the normal increase in enrollment and to take the places of those who are leaving school for other work. Three hundred and twenty-three colleges show that 10,680 men and 9,327 women graduate this year, and 1,730 men and 4,742 women will take up the work of high-school teaching. On this basis, it is estimated that only 10,620 members of this year's graduating class will accept positions in the high schools, while there are 25,978 places to be filled. The shortage of 15,358 teachers must be filled by a shifting of teachers or the employment of teachers who have not completed a college course.

Evidently the greatest difficulty in obtaining and holding good teachers will be in the rural high schools. In these schools, where an attempt is made to adapt the course of study to the rural life, and where teachers trained for high-school and rural work are engaged, the commercial world and the city schools have made marked inroads.

In attempting to meet the emergency in a practical way the State of Maine has inaugurated a training school for rural teachers at the normal school at Castine, Me., where 100 rural teachers, selected on account of efficiency in the work, are sent at the expense of the State for a six weeks' course of summer training. The results of last year's work as reported by the State superintendent, A. O. Thomas, are satisfactory to a marked degree and indicate a means of developing teachers in service which promises possibilities in other States.

New Jersey by a recent law has inaugurated a system of so-called "helping teachers." By this law teachers, in addition to the regular schoolroom rural teachers, are provided to assist in detail work of the rural schools. An indefinite number of schools are assigned to the helping teacher, who is selected for special fitness.

SALARY SCHEDULES.

Salaries of school-teachers, which advanced from $563 in 1916 to $635 in 1918, showed a marked increase during the past year. Reports from 47 States, based on three counties selected at random from each State, give data for the salaries of rural teachers. For the first time there is a basis for an estimate of teachers in rural

schools. The 8,581 teachers who were reported were engaged in elementary and high-school work in rural schools. The average salary for all was $635.96 for the year 1919–20. The white man average, $711.68; the white woman, $629.61; and the colored man's average, $372.64; and the colored woman, $360.96.

INCREASED SALARIES.

Throughout the country there has been a definite movement toward the increase of teachers' salaries which involves not only the city schools but the rural schools also. State schedules are being adopted, one of the most recent being the law enacted at the special session of the Indiana Legislature, where a definite increase based on examination and successful experience has made a marked showing in the minimum salaries of all teachers of the State. There is a decided movement toward minimum salaries above which the local communities can pay as much as they desire.

All salary schedules to be of value must be based on ability and experience. The recent conference of national organizations passed a resolution in favor of higher salaries for teachers, in which the following recommendation was made: "That salaries of teachers should be equal to the salaries paid in other lines of work to persons having the same preparation, ability, and experience."

CONSOLIDATION.

The past year has seen marked progress in the matter of consolidation. Probably the greatest advancement has been made in the State of Iowa, which has averaged one consolidation effected for each day of the school year. By consolidation is meant the union of school districts for the establishment of a graded school with the advantages which come from a modern school plant organized and administered by trained educators.

The plan of Iowa and Minnesota, which gives aid to the consolidated school, has brought to these two States unusual progress. The consolidated schools in the United States number now about 12,000. The greatest development has been in the Middle West. Indiana, Minnesota, Iowa, North Dakota, and Colorado are some of the leading States in this movement. The Sargent School, in Rio Grande County, Calif., is a conspicuous example which has been widely discussed. The press has given much attention to the matter of consolidation during the past year, and the movement is gaining much headway.

A compilation of reports from 1,400 farmers who have tried consolidation in Iowa gives abundant proof that the people of the country are well satisfied. Ninety-four per cent of the 1,400 patrons

express themselves as highly pleased with the results of schools which have been in operation for several years. Eighty-five per cent of the patrons whose children ride 5 to 6 miles each way each day say they are well pleased. Transportation and good roads are intimately connected with the movement for consolidation and better schools. Consolidation has been shown to be advisable in any district in which the children can be transported in comfort. The coming of the automobile bus has simplified many problems. Consolidation, with the benefit of graded schools and high schools, community work, and good roads, promises much toward the solution of the rural-school problem. It also makes possible the planning of a school which conforms to the laws of sanitation, convenience, and efficiency. It also makes possible a teachers' home in connection with the school, which is one of the great problems of the rural school to-day. It is estimated that 18,000 rural schools were closed or filled with substandard teachers because there were no convenient or suitable homes for the teachers.

VOCATIONAL EDUCATION.

EDUCATION IN THE ARMY.

One of the outstanding phases of the year's progress in vocational education is the development that has taken place in the United Sates Army. Time was when the conditions surrounding the service were not such as to appeal to the best type of our young men, but these conditions have undergone radical change. Indeed, it would now be difficult to tell the plain facts about the opportunities for education, and especially vocational education open to the young man who enlists in the Army without making this section read like recruiting propaganda.

According to a statement issued in March, 1920, by the office of the Chief of Staff, over 100 different courses of study are now available to the enlisted men in the Army, 2,500 classes are receiving instruction in these courses, and approximately 100,000 soldiers are enrolled. The Army schools are located in all parts of the United States as well as overseas, the number of subjects taught in the various camps ranging from 10 to 40.

The fundamentals of many lines of work are offered at all the larger camps, while the individual soldier can obtain instruction in the higher and more technical phases of his chosen vocation by transfer to one of the camps specializing in that field. For example, in all the larger camps, with a few exceptions, elementary instruction is offered in such occupations as blacksmith, machinist, electrician, photographer, lithographer, surveyor, autogenous welder, auto-repair man, mason, draftsman, carpenter. For the more advanced

work in these and other lines the Corps of Engineers maintains a school at Camp Humphreys, Va. Similarly, the Chemical Warfare Service, the Medical Department, the Motor Transport Corps, and other branches of the service maintain special schools in which the most advanced instruction is available.

All courses manifestly can not be conducted at all posts and camps; but, consistent with its facilities, every camp, post, or station will offer the maximum possible choice in educational and vocational education.

Henceforth, the young man who enters the United States Army will be given a course of training which will be equivalent to an industrial training school. When he has completed the years of his service as a soldier and returns to civil life he will return qualified for a definite occupation. Those who seek expert employees will look to "graduated" Army men as probably the best-equipped technically trained men to be had.

The Army training will, however, be broader than merely to fit a man into industry. It will make a better citizen, a broader-minded man in every way. It will bring to thoroughly practical industrial training the culture that can reasonably be combined therewith.

It is proposed to make the Army not only a military force to be trained and ready in time of national emergency, but to make it a great educational institution where young men with the best mental, moral, and physical qualities, and with the highest ideals of patriotic citizenship, will be produced.

The Adjutant General's Office made public a statement showing that on December 31, 1919, there were 93,423 men receiving instruction, or 54 per cent of the total Army strength of 172,266. Of these, 58,508, or 34 per cent of the entire personnel, were enrolled in vocational courses.

The significance of the Army contribution to vocational education may be partially visualized by considering what the conditions would be if the opportunities open to the soldiers were to be opened to the entire population in the same proportion. There are in the United States not far from 15,000,000 youth of both sexes, of ages 18 to 25 years, inclusive. If 34 per cent of these were enrolled in vocational schools, the number of students would be approximately 5,000,000. As a matter of fact, it is doubtful if more than 400,000 persons of all ages in all the United States are receiving definitely organized vocational instruction.

EDUCATION IN THE NAVY.

Recent developments in the Navy have been scarcely less noteworthy than those in the Army. For years the Navy has been committed to a thoroughgoing policy of education, and since the cessation of hostilities the work has been reorganized in such a way as to utilize the results of observations made during the war.

On June 1, 1920, after some months of preparation, a new educational plan was put into operation for men at sea. The *Rochester*, flagship of a destroyer flotilla, was selected for the purpose of trying

out the new plans, and later the *Dixie*, which is the repair ship for the same flotilla.

During the summer of 1919 there was organized the sixth division of the Bureau of Navigation, charged with responsibility for education, recreation, athletic sports, motion pictures, music, dramatics, social hygiene. The Navy has laid much emphasis on the advantages of travel and study afforded by enlistment.

Neither travel without study nor study without travel spells education. To study for a long period and then travel for a like period is not the ideal; but to study while traveling and to travel while studying *is* the ideal.

A more definite attempt than ever before is now to be made to stimulate the men to take advantage of available opportunities. The strictly educational part of the Navy plan is based on the following features:

1. The school work is optional.
2. An education officer is detailed to the ship to encourage and aid the men in their school work.
3. The commanding officer sets aside specific time for study.
4. The chief methods of instruction include the use of study outlines based on the best experience of correspondence schools; the use of motion pictures, lantern slides, charts, etc., and the counsel of an education officer.
5. The education officer observes a definite schedule of office hours in order to be accessible to the men for individual interviews.

The plan proposes to utilize the advantages of the better type of correspondence instruction, with the addition of the personal attention and guidance of experts in various lines, chosen from among the officers on board the ship. Practically every man in the entire Navy personnel of 100,000 is receiving some vocational education in connection with the training for his regular duties. The new plan supplements this training by providing opportunities for systematic instruction looking beyond the demands of immediate daily duties.

NEW STATUS OF VOCATIONAL EDUCATION.

Not only are the changes in attitude and practice which have taken place in these two branches of the Government revolutionary so far as the services themselves are concerned, but they are to be accounted among the most striking evidences of the growing recognition by the American people of the value of genuine vocational education. It is not sufficient, nor is it quite correct, to attribute these changes to lessons learned from the Great War, for their beginnings, especially in the Navy, can be traced further back.

It is well for educators, and the Nation generally, to recognize that the controlling reason for introducing the means of vocational education into the Army and Navy is that, when efficiently administered, they produce desired results. The Army is charged with the

responsibility of making young men into efficient soldiers, the Navy into efficient seamen. To make a man a high-grade automobile mechanic, or chemist, or electrician, is only a part of the task in either case. The significant thing is that those in authority have come to perceive that it *is* a part, and that it is an essential part.

There is no evidence that the making of soldiers and sailors is subordinated to the making of mechanics and engineers, and it does not appear that any serious difficulty along this line is anticipated. In other words, vocational education is not "running away" with the Army and Navy, as might be expected or prognosticated from the alarmist views expressed from time to time by certain critics of vocational education.

Leaders of educational thought have accepted the validity of the conservative claims of vocational education. They welcome this impressive demonstration, which will not fail of its effect upon their followers, and upon the people themselves. The task of public education in America is to make young men and young women into intelligent, responsible, and efficient citizens. An indispensable part of this task consists of making them also capable machinists, salesmen, draftsmen, homemakers.

A part of this work has long been done, without serious complaint or outcry from any influential source. A favored few find abundant opportunities, provided at public expense, for the most advanced training in the law, medicine, engineering, and a few other lines. That an enlightened civilization should permit thousands of boys and girls from the less-favored homes, because of limited vision, to abandon their educational opportunities at an immature age, to take potluck with the exploiters of youthful inexperience and the drivers of child labor, is no less than scandalous.

Some way must and will be found to train youth for economic independence and productivity without sacrifice of the essential general education requisite for responsible citizenship and the intelligent discharge of social duties. The contribution of the Army and Navy may be likened to the searchlight placed at the disposal of the pilot of a ship on a dark night.

PROGRESS IN THE STATES.

Reports from State directors of vocational education show substantial progress in many directions. It is impossible in the brief space available to do more than summarize a few of the more important points brought out. In a number of States the establishment of new schools and classes has proceeded just as rapidly as the State representatives could take the necessary official action. This is especially true in States which organized vocational education de-

partments for the first time after the passage of the Smith-Hughes Act.

Among the evidences of progress cited in the State reports are the following:

Increased interest in vocational classes and more sympathetic cooperation on the part of the regular school superintendents, principals, and teachers.

Splendid cooperation on the part of organized wage earners.

Wholesome development of public sentiment in regard to vocational education, and especially a more favorable attitude on the part of State legislatures.

Removal of legal restrictions, and extension of the benefits provided.

More rapid development, relatively, of part-time classes and evening classes.

Increased efficiency in the administration of plans for the preparation of teachers.

Development of plans for the improvement of teachers in service.

Increased efficiency, due to additions to State supervisory staffs.

Improvement in the quality of the work done and the methods employed in vocational schools.

The task of preparing or discovering teachers for vocational schools continues one of the serious problems, several States reporting inability to secure qualified teachers rapidly enough to use all available appropriations.

STATISTICAL EVIDENCE OF PROGRESS.

Under the provision of the Smith-Hughes vocational education act, the Federal Board for Vocational Education is charged with the promotion of certain specific types of instruction, "the controlling purposes of which must be to fit for useful employment," which must be "of less than college grade," and "must be designed to meet the needs of persons over 14 years of age who have entered upon or who are preparing to enter upon a vocation." The board is authorized to require reports from schools receiving Federal aid, and, consequently, as pointed out in these pages last year, the annual report of the board now furnishes a basis for a quantitative study of the progress of vocational education which has been lacking heretofore. It is to be noted that the figures given relate to that portion of the field of vocational education comprised within the activities of the board.

The third annual report of the board, which has appeared during the period under review, shows that during the fiscal year ended June 30, 1919, the total number of schools reporting federally aided vocational instruction was 2,039.[4] This is an increase from 1,741 in 1918 of 298, or 17.1 per cent. The report calls attention to certain reasons why the number of schools is not an accurate measure of the development which is taking place in the work.

[4] Third An. Rept. Federal Board for Vocational Education, 1919, Table 1, p. 193.

In Table 2 of the same report the number of vocational teachers, or, more properly, "teaching positions," in schools federally aided is given as 5,257 in 1918 and 6,378 in 1919, an increase of 1,121, or 21.3 per cent. The number of vocational pupils in these schools, Table 3, was 164,183 in 1918 and 194,895 in 1919, an increase of 30,712, or 18.7 per cent.

The figures for expenditures show somewhat greater expansion. The amount of Federal money expended by the States for reimbursement was $829,783.96 in 1918 and $1,136,519.01 in 1919, an increase of $306,735.05, or 36.9 per cent.

The increased use of Federal funds in the States is fairly well distributed through the several geographical regions in which the States are grouped for administrative purposes. * * * With the exception of North Dakota, every State received a larger amount of Federal money for reimbursement of schools in 1919 than it received in the preceding year. With few exceptions, it is true also that the States increased their utilization of each of the several Federal funds available.

From the figures quoted above it appears that the Federal Government reimbursed the States an average amount of $476.61 per school in 1918 and $557.39 in 1919; $157.84 per teacher in 1918 and $178.19 in 1919; $5.05 per pupil enrolled in 1918 and $5.84 in 1919.

From the figures given in Table 14 of the report of the Federal board, the following table has been prepared to indicate the distribution of schools throughout the States. Nine States (Maine, New Hampshire, Vermont, Connecticut, New York, New Jersey, Pennsylvania, Minnesota, Oklahoma) report 270 fewer vocational schools federally aided in 1919 than in 1918. Two States (Nevada and Wyoming) report the same number of schools. The remaining 37 States report increases in the number of schools from 1 to 70. The States reporting the largest increases in number of schools are Ohio, 70; Illinois, 57; West Virginia, 32; Utah, 31; Kentucky, 27; Virginia, 27.

Number of vocational schools federally aided, by States, for years ended June 30, 1919 and 1918.

Number of schools.	Number in 1919.		Number in 1918.	
	States.	Schools.	States.	Schools.
1–9	1	9	8	47
10–19	12	163	13	173
20–29	10	242	14	343
30–39	5	170	1	34
40–49	6	261	3	142
50–59	5	268	.....	.....
60–69	1	67	4	253
70–79	3	216	1	71
80–89	1	84	2	171
90–99	1	90	.....	.....
100–199	2	233	1	114
200–299	1	236	.....	.....
300–399	.....	.....	1	393
Total	48	2,039	48	1,741

It will be observed, further, that in 1918, 25 States reported fewer than 30 schools, and that in 1919 this number of States was reduced to 23. The number of States reporting 50 or more schools increased from 9 to 14.

In 1918 there were 94 institutions (besides additional extension training centers) in 42 States receiving Federal aid for the preparation of vocational teachers. In 1919 all of the 48 States participated in this phase of the work, reporting 144 institutions. The number of prospective teachers in training at these institutions increased from 6,579 in 1918 to 7,364 in 1919. In this connection it may be noted that the number of teaching positions in federally aided vocational schools increased from 5,257 in 1918 to 6,378 in 1919.

STUDY OF INDUSTRIAL RELATIONSHIPS.

At the annual conference of specialists engaged in the preparation of teachers for vocational schools called by the Commissioner of Education and held at the University of Cincinnati December 4–6, 1919, Charles R. Allen, of the Federal board, reported that in a series of conferences and discussions with a group of foremen "over 70 per cent of the problems suggested by the foremen related to responsibilities connected with handling men." Prof. MacDonald, of the University of Cincinnati, expressed the conviction, which was echoed by others present, that a study of "industrial relationships" must be included in a course for the preparation of industrial teachers.

The increasing emphasis on the importance of this topic during recent years is another indication of the tendency in the vocational education movement to take the broader statesmanlike view of the educational problem rather than the narrower view, so frequently and justly criticized, of simply fitting individuals for specific tasks. Vocational education, to function properly, must indeed be specific and must prepare individuals to render definite service, but the point is that the vocational training must be given as part of a complete education which gives full recognition to and makes full provision for the other important duties of life besides wage earning.

A broad-gauged study of the problems of preparing efficient wage earners in industrial plants, therefore, has emphasized the necessity of taking into account the essential relationships: The wage earner and his employer, the wage earner and the foreman, the wage earner and his fellows, and the like.

That this problem is receiving serious consideration is evident in the fact that at least 16 institutions are offering definite courses of instruction in the theory and practice of employment management,

labor administration, organization of personnel departments, factory management, applied commercial and industrial psychology, and other phases of "industrial relationships."

The report of a recent study lists the following institutions as offering courses of this description:[5]

College of Business Administration, Boston University, Boston, Mass.

The Carola Woerishoffer Graduate Department of Social Economy and Social Research, Bryn Mawr College, Bryn Mawr, Pa.

The Bureau of Industrial Research, New York City, cooperating with the New School for Social Research, and the Training School for Public Service of the Bureau of Municipal Research.

College of Education, University of California, Berkeley, Calif.

School of Business, Columbia University, New York, N. Y.

The Amos Tuck School of Administration and Finance, Dartmouth College, Hanover, N. H.

School of Accounts and Finance, University of Denver, Denver, Colo.

The Bureau of Vocational Guidance, and the Graduate School of Business Administration, Harvard University, Cambridge, Mass.

School of Commerce, Northwestern University, Evanston, Ill.

Ohio Mechanics Institute, Cincinnati, Ohio.

Pacific Coast Bureau of Employment Research, San Francisco, Calif.

The Wharton School of Finance and Commerce, University of Pennsylvania, Philadelphia, Pa.

Washington University, St. Louis, Mo.

Dunwoody Institute, Minneapolis, Minn.

The Extension Division, University of Wisconsin, Madison, Wis.

Sheffield Scientific School, Yale University, New Haven, Conn.

To this list should be added the Department of Vocational Education, Indiana University, Bloomington, Ind.

JOINT CONVENTION OF VOCATIONAL EDUCATIONAL ORGANIZATIONS.

The joint convention of the National Society for Vocational Education (thirteenth annual meeting) and the Vocational Education Association of the Middle West (sixth annual meeting), held in Chicago February 19–21, 1920, was authoritatively characterized as "the largest and most representative convention ever held in America in the interests of vocational education." Every State in the Union except one was represented in the attendance. Fifteen States and the District of Columbia were represented by 10 or more representatives each and Canada by 3.

The main topics considered were:

1. Vocational education and the present economic interest.
2. Vocational education in conjunction with military service.
3. Full and part-time vocational education in secondary schools.
4. Future problems of State and national administration of vocational education.

[5] Memorandum, Industrial Information Service, Boston University, Boston, Mass.

COMMITTEE REPORTS.

One notable feature of the program consisted of the reports presented by a number of working committees. Of especial interest was the report of the committee on women in industry, Miss Cleo Murtland, chairman. The committee presented a carefully prepared statement, declaring that—

> Vocational education for trade and industrial occupations for women should be greatly extended in order that each individual girl or woman may be assured the opportunity of doing the highest type of productive work of which she is capable during the period previous to marriage, or, if she does not marry, for the period of her working life, or for the married woman who, because of widowhood, desertion, childlessness, or some other deviation from normal married life, returns to industry as a wage earner.

Estimating that 11,000,000 of the girls and women over 10 years of age in 1919 were wage earners, the report analyzes the objectionable conditions which have surrounded girls and women in industry. It recognizes that vocational education for girls and women is a twofold problem, preparation for wage earning and preparation for home making. The discussion, however, is confined to preparation for wage earning in industry. Among the "solutions of these problems" the following recommendations are made:

> Better general education (at least 8 to 10 years of schooling) and better vocational education; a considerable part of both should be assured prior to the beginning of wage earning, but part can only be given parallel to the pursuit of such work.
>
> One fundamental aim should be to give girls understanding of conditions of wage earning and of the possibilities available for the protection of health, morals, earning capacity, and promotion to higher levels of employment.
>
> Employment in one stage of specialized work should be regarded as but one stage from which the individual should advance as experience, maturity, and additional training justify advancement.
>
> Efforts must be made to counteract the social prejudice against industrial occupations for girls and women and to promote knowledge of the job, group consciousness, and working integrity among women workers.

Another committee, Prof. Edwin A. Lee, chairman, presented in a 12-page pamphlet the results of a careful study of "the conditions of successful vocational training in high schools." The aim of vocational training in high schools is stated to be the preparation of individuals for entrance into industrial occupations with some acquaintance with the technic of the trade studied, understanding of the related technical knowledge of the trade, appreciation of the human-nature element in industry, some degree of skill in certain general operations of the trade, and for intelligent and responsible citizenship. Among the essential conditions outlined by the committee are the following:

Vocational teachers should have professional training and teaching skill as well as technical knowledge of their trades; attendance upon advanced teacher-training courses, when available, should be a condition of increase in salary.

The school plant and equipment must be such as to afford or interpret real vocational experience.

Cordial cooperation and support of the school program on the part of employers and employees.

Positive support of the vocational program by the superintendent of schools and intelligent understanding of it by the high-school principal and the entire teaching staff.

The special committee on vestibule and upgrading schools, in a statement by H. E. Miles, offered the following conclusions:

The ground covered by an apprenticeship under ordinary conditions can be covered by upgrading methods in a factory training department in one-third to one-half less time.

Vocational training as given in our public schools has substantially no relation to the needs of 90 per cent of our industrial workers.

Vocational teachers should have a clear understanding of the methods of factory production.

Another valuable report was that of a special committee on social science in vocational classes, Miss Ruth Mary Weeks, chairman. The report outlined a series of lessons for one year's study of the essentials of history, economics, and sociology.

The following paragraphs are condensed from the report of the committee on resolutions, adopted by the convention:

Recommending that the Department of Superintendence of the National Education Association be requested to provide a strong program of vocational education at its next annual convention.

Urging State and Federal authorities to adopt more vigorous methods for the promotion of industrial education for girls and women.

Urging more effective measures for the training of foremen and factory superintendents.

Recommending Federal aid for vocational commercial education, and increased Federal appropriations for vocational home-making education.

Recommending the development of suitable tests of individuals, by try-out courses and other means, to precede entrance into vocational courses.

HOME ECONOMICS EDUCATION.

Home economics educational courses have undergone a satisfactory reorganization following the disturbed condition due to the war.

A vigorous and sustained effort has developed to emphasize, in all classes, the relation of home economics instruction to healthful living, financial thrift, and social service.

A number of extraneous forces have reacted upon home economics education. The widespread interest in child health and welfare, with special stress upon the widely prevailing condition of malnutrition, has opened avenues to women trained in home economics for service in the conduct of food clinics, nutrition classes, and the redi-

rection of school lunch-room management. Physicians and hospital authorities have recognized, more than ever before in the practice of medicine, the relation of diet to disease, and the need of highly trained home economics women as prescribing dietitians. Operators of industrial plants and administrators of mercantile establishments have employed home economics women to supervise their social service. Banks have established home economics graduates as advisors of their women depositors in methods of wise spending. These forces have modified, as well as intensified the home economics instruction given in universities, colleges, and normal schools.

UNIVERSITIES, COLLEGES, AND NORMAL SCHOOLS OFFERING HOME ECONOMICS COURSES.

The number of institutions of higher education maintaining courses in home economics has not greatly increased during the past year. At present all State universities except six and all land-grant colleges for white students except five offer home economics. Those which do not provide for this instruction are usually institutions for men which either actually exclude women or discourage their attendance.

One hundred and seventy-seven normal schools support home economics departments and employ 379 teachers; 306 colleges and universities employ 1,133 teachers of home economics. Besides these institutions, almost all academies and junior colleges admitting girls offer courses in this subject.

HOME ECONOMICS IN LIBERAL ARTS COURSES.

Home economics is now accepted in many liberal arts schools as an essential part of a woman's well-rounded education. This sentiment is reflected in the University of Oregon, where there is a strong demand for certain courses that will be of special value to students preparing for professional life as journalists, doctors, social workers, physical-training teachers, etc. It is felt that the courses in care of children and care of the sick, together with elementary dietetics and household budget making, are particularly needed by practically all women students as a part of a well-rounded training for citizenship (as apart from a definite "home making" or a professional home economics career) and these courses, already very much in demand and successfully developed during the past two years, will be greatly strengthened in the future.

NEW COURSES IN CHILD FEEDING AND WELFARE.

Child-feeding and child-welfare courses have been added to the home economics departments of many institutions of higher educa-

tion; and special instruction in advanced nutrition classes has been given a prominent place in these schools.

In Purdue University two new courses were developed in the past year; the first being a course in child care and management, offered to seniors specializing in home economics. This course included three lectures and demonstrations per week for one semester. There were 63 enrolled in the class, and the students were greatly interested in the work. The instructor is a graduate nurse who is also a graduate in home economics, and is a woman who has had a great deal of experience in connection with the care and handling of children.

The Michigan Agricultural College offered an elective course in advanced nutrition, which attracted 41 seniors. It is especially planned that this course shall lead to nutrition clinics for the mothers and children of Lansing. Already these graduates have been called to assist in other cities in this type of social service.

Oregon Agricultural College, the University of Minnesota, Cornell University, and other colleges and universities had babies or small children in the practice houses, in order that their courses in child care might be more valuable.

COURSES IN THE CONDUCT OF SCHOOL LUNCHES.

A generally accepted dictum is "that all public-school lunch rooms should be under the supervision of the home economics departments." In consequence of this cafeteria courses have been established in many institutions. Purdue University, Kansas State Agricultural College, and Oregon Agricultural College are among the colleges reporting these courses.

The rural-school hot lunch has been given especial attention in the normal school's home economic departments. Georgia Normal School, at Milledgeville; South Dakota Normal School, at Aberdeen; and the normal schools of the State of Washington have conducted intensive courses in rural-school lunch work.

SPECIALIZED COURSES FOR DIETITIANS.

These courses are now offered in all leading home economics schools. The Battle Creek School of Home Economics requires that its graduates have actual experience as student dietitians before accepting administrative positions.

At Drexel Institute the course comprises two years' work after high-school graduation. The students carry standard courses in organic chemistry, inorganic chemistry, technical chemistry, physiological chemistry, and pathological chemistry, physics, bacteriology, physiology, accounting, principles of food preparation and nutrition, institutional cookery, and management.

Graduates of the University of Wisconsin, the Ohio State University, Iowa State University, and other similar institutions are now prepared to be prescribing dietitians.

HOME ECONOMICS IN PUBLIC HIGH SCHOOLS.

There are now more than 8,000 high schools offering the opportunity to girls to elect one or more years of this work. The annual increase in the number of high schools offering home economics has been about 600. A questionnaire sent to all high-school principals resulted in answers from about 50 per cent of them. One State—Illinois—contributed 311 replies. Of the 311 high schools, 184 maintained courses in home economics and enrolled 13,334 students in regular high-school home economics and 1,753 in high-school classes aided under the Smith-Hughes law.

Since it is the larger high schools which support departments of home economics, it is evident that the majority of all high-school girls in the United States now have an opportunity to study home economics if they so elect.

Statistics show that high-school girls frequently fail to avail themselves of the opportunity. This failure may be traced to difficulties in adjusting schedules to courses requiring the long period usually considered necessary for home-economics work. Chicago is leading in the experiment of teaching home economics in a 60-minute period.

High-school girls generally enter commercial courses, trade courses, or courses in liberal arts, preparing for college entrance. A fully organized continuous home-economics course either interferes with their pursuit of a chosen course, or else is not so presented that they realize the real value of home economics as a part of their general education.

In order to make home economics attractive to all high-school girls, the home economics high-school teachers of Chicago passed a resolution and presented it to the city superintendent of schools, requesting that the present four-year course be abandoned and in its place six separate semester courses be offered. They further requested that in planning high-school courses next year it be made possible for every girl in a regular course to take an elective in household arts in any semester.

The idea actuating these requests is, that all high-school girls should have an opportunity to take some home economics instead of being forced to choose either a four-years' course or no home economics at all.

In Los Angeles and several other cities, home economics is now required for one high-school year, while in Berkeley, Calif., certain home-economics units are classified as social-science subjects in the social-science course.

HOME ECONOMICS IN PUBLIC ELEMENTARY SCHOOLS.

The rate of increase in the number of public schools maintaining departments of home economics has been normal. Two-thirds of all the larger school systems report that home economics is required of all girls in the seventh and eighth grades. In a considerable proportion of cities it is required of fifth and sixth grade girls as well as of those in the upper two grades.

The great number of girls reached by instruction in home economics is indicated by the following figures taken from reports of various cities chosen at random:

Boston, Mass.:		Los Angeles, Calif.:		Philadelphia, Pa.:	
Fourth grade	5,950	Fourth grade	2,498	Fifth grade	13,126
Fifth grade	5,234	Fifth grade	4,300	Sixth grade	12,117
Sixth grade	5,335	Sixth grade	3,931	Seventh grade	9,298
Seventh grade	4,900	Seventh grade	3,385	Eighth grade	8,035
Eighth grade	4,561	Eighth grade	2,305	Total	42,576
Total	25,980	Total	16,419		

In the elementary schools of these three cities alone 84,975 girls received some training in the arts of the household. When to these are added all of the girls in the sixth and seventh and eighth grades in Chicago, the seventh and eighth grades in New York, in Cleveland, in Detroit, and all other larger cities in the United States, it is inevitable that there must be finally a marked effect on all American homes.

There is a general effort to insure that the school home economics education functions in the home life of the girl, that efficient methods of work are taught, and that the best standards of American living are maintained. Establishment of health habits and preparation for home helpfulness are the dominant motives now determining the courses of study and the methods of instruction. Hence, home economics in the elementary schools has undergone interesting modifications of work, as the following quotation from one city supervisor of home economics indicates:

> This year we have made the work in nutrition more concrete and vital by relating it more closely to the feeding of children. Every girl was weighed and measured and taught to keep her own record. If through her knowledge of foodstuffs her weight did not become normal through modified diet, then the cause was found. This gave rise to the relation of personal hygiene, tonsils, adenoids, teeth, etc., to health.
>
> The results were most gratifying. In many cases parents appreciated the situation and responded, and the whole family benefited.
>
> We plan next year to have every girl in the schools taking domestic science to be personally responsible for the improvement in diet and health of at least one child outside her immediate family. Credit will be given on the results.

In San Francisco the home-economics department took over the management of the lunch room of the Buena Vista School, where a group of 50 undernourished children were cared for in open-air

classrooms by the Associated Charities and the Antituberculosis Association. There were 18 girls in the cooking class of this school, who prepared the hot drink or hot dish that was served every day. The girls worked in groups of four, under the supervision of a domestic-science teacher on one day of the week, and with a student-teacher from the Lux School on the other days. The meal was served in pleasant surroundings, and the children fed gained in weight. They were taught table manners and habits of neatness.

The making of simple wash dresses is now introduced in the sixth grade of Los Angeles schools, whereas a few years ago the use of the sewing machine was delayed until the high school was reached.

HOME TEACHERS.

The law of California permits the employment of one home teacher for every 500 pupils in attendance. Not all the cities have availed themselves of this opportunity of articulating the school with the home, but in January, 1920, the board of education of Berkeley appointed a home-economics teacher as the first home teacher in the schools of that city. Her function is the correlation of the work of the home and of the school. She counsels with the mothers, and in nearly every case brings about improved conditions, either through cooperation with the Berkeley dispensary or through beneficial changes in the home. She conducts nutrition classes for the pupils of the fifth and sixth grades in the two schools where she works. Among the results already accomplished are the substitution of milk or chocolate and cereal for the coffee and bread which formally composed the breakfast for a large proportion of the children; the formation of "anticoffee clubs," the increased use of fruits and vegetables, and the general intelligent reorganization of the diet, not of the children only but of many entire families.

It is the aim of the home teacher to use the facilities of the domestic science rooms to give lessons in better home making to the foreign-born mothers. Promising beginnings have been made this year. It is only a question of time when there will be regular classes of women meeting in the two schools for the study of nutrition, hygiene, and other subjects that make for better homes and families.

VOCATIONAL HOME ECONOMICS.

Almost all the State supervisors of home economics are paid about one-half of their salary out of Federal money, appropriated by the Smith-Hughes Act. Following the appointment of these supervisors, vocational home economics has been developed along different lines in different States, depending almost wholly on the interpretation placed upon "vocational home economics." If this term is

given by the State authorities the interpretation generally accepted by educators as the meaning of "vocational," then the report resembles the following received from Wisconsin: "Total number of schools receiving Smith-Hughes aid for home economics, 68, divided as follows: 'Part-time schools,' 32; 'night schools,' 30; 'all-day schools,' 6."

If it is assumed that all home economics is vocational, then the reports are similar to that of Nebraska, which gives Federal aid and partly federally supported supervision to 2 night schools and 43 standard high schools, or that of Minnesota, where Federal aid is extended to 1 night-school class and 8 regular day schools.

The confusion as to the meaning of vocational home economics will tend to clarify itself in succeeding years.

HOME DEMONSTRATION WORK UNDER THE SMITH-LEVER ACT.

More than a thousand women are now engaged as agents in home demonstration work. This is one of the most important types of home-economics education. Usually these agents are women educated in home economics and graduates of colleges, universities, or normal schools.

Their methods of approach in their special field differs in different sections of the country. One county agent in Tennessee established a nutrition clinic for rural children. She cooperated with the farm bureau, the county board of education, and the local parent-teacher association. Two thousand five hundred children were examined and a class of 15 selected for demonstrating methods of overcoming the condition of malnutrition.

In general, the home demonstration agent strives to assist the rural housewives in applying business principles to household tasks for the purpose of making the farm home as efficient as the farm, thus contributing to the development of a better type of rural life.

HOME-ECONOMICS EDUCATION IN FOREIGN COUNTRIES.

Belgium.—As a result of the efforts of M. Paul De Vuyst, director general, ministry of agriculture, a college of agriculture and home economics for women is being established in Lierre, one of the suburbs of Brussels.

New Zealand.—A very fine addition to the Otago University has just been made, at a cost of nearly £10,000, of well-equipped laboratories for teaching domestic science. Domestic science is growing in favor, and last year these classes were well attended by 38 holders of Government scholarships.

At Brighton-on-the-Sands, Sidney, there is an experimental school where girls are taught domestic economy in its various phases.

England.—In discussing the reorganization of English public-school education, Sir Aukland Geddes says: "The secondary school (age range at 12–17, maybe 10–18) has not been neglected and the arrangements there are of considerable interest. * * * For girls, needlework, cookery, laundry work, housekeeping, and household hygiene are compulsory subjects."

Poland.—Elementary schools' seven-year program provides for needlework two hours a week in grades 3 to 7, inclusive. The normal schools for girls teach gardening, agriculture, cooking, sewing, and dressmaking. There is a free course of one year in the State seminary for the training of home economics teachers.

Chile.—In Santiago home economics was first established in 1907 by a teacher brought from Sweden. Great efforts are being made to adapt the instruction to the social and economic conditions existing in a country where there is a superabundance of labor for household employment. There is now a three-years' course in teacher training leading to the title "professor" and including not only cooking, garment making, and child-care, but also the history of education, psychology, pedagogy, civics, political science, and other subjects.

Canada—Saskatchewan teachers' courses.—Acting upon the request of the department of education, the council of the University of Saskatchewan has recommended to the Senate the establishment, during the academic year 1920–21, of a one-year course in household science for teachers in provincial schools.

The object of this course is to give, within the period of the ordinary academic year, work which will be of substantial service to teachers in improving their equipment in household science. The course will include both foods and textiles, as well as the related subjects, including chemistry.

To be admitted to this course teachers must have a second-class license or higher credentials. Preference will be given to teachers having three or more years' experience in the public schools. The class will be limited in number, and therefore it is suggested that early application for admission be made to the registrar of the university. It is recommended also that those teachers who have not had the work in chemistry required for first-class diploma should, if possible, take the course in chemistry to be given at the summer session of the university.—*Journal of Home Economics.*

Constantinople College.—The American Home Economics Association raised a fund of $6,000 to support a professorship in home economics in the Constantinople College for Girls. The fund will support the chair for three years, after which is expected that the trustees of the college will be able to continue its maintenance.

HOME ECONOMICS ORGANIZATIONS.

The American Home Economic Association is the national organization of professional women, and admits to its membership anyone interested and in sympathy with its objectives. The Journal of Home Economics is sustained by the association and is the only technical and professional journal of its kind in the country.

In addition to the national association, there are regional, State, and city organizations of home economics women, all bending their efforts to increase interest in home economics education, in scientific research, affecting the problems of the home, to improved conditions for the welfare of children, in careful use of national wealth, and in personal thrift and intelligent investment of savings.

AGRICULTURAL EDUCATION.

AGRICULTURE IN THE COLLEGES.

Following the arrested development during the period of the war, the year covered by this report is marked by many conspicuous changes in the organization and policies of the colleges of agriculture. The lessons growing out of the Nation's experiences connected with the raising of an efficient fighting force and the enormous problem of maintaining an adequate food supply are responsible to some extent for the activity of the colleges in the development of efficient organizations.

On the other hand, owing to greatly increased enrollment, coupled with the diminished purchasing power of the dollar, many institutions have had great difficulty in maintaining themselves. The dean of the college of agriculture in one of the larger universities sums up the situation at his institution as follows:

> We have been caught with a greatly increased attendance and a decreased faculty, and it has been a case for the last year of meeting situations as best we could from time to time. We have about 35 vacancies on our faculty which we can not hope to fill, and the result is that we are not only unable to do new things, but we can not do the old things as well as heretofore.

Changes in organization.—The most conspicuous change in organization during the year is that illustrated by the action of California and Cornell Universities in relieving their respective deans of agriculture of the details of administration by the appointment of subordinate administrative officers in charge of the three familiar lines of work—resident teaching, research, and extension. One of the chief objects of such action is to facilitate the concentration of effort on the respective programs of the college. This tendency among the colleges, it is believed, will result in more efficient service, especially in the improvement of instruction.

In some of the colleges, notably the Alabama Polytechnic Institute and the Maryland State College of Agriculture, the responsibility of the officers in charge of the three lines of service extend throughout the institution. That is, the direction of resident instruction is responsible for the proper development of the curricula and the improvement of instruction in all divisions, such as agriculture, engineering, general science, veterinary science, etc.; the director of the

experiment station is responsible for research in all divisions; and the director of the extension service is responsible for the extension activities of the entire institution.

Relation with secondary schools.—Since most of the States have developed strong secondary schools of agriculture, an earnest effort has been made to establish closer articulation between secondary and collegiate courses in agriculture. The past year has witnessed conspicuous progress in this respect. The movement has been greatly stimulated by the action of the Bureau of Education committee on course of study in agriculture. This committee, composed of prominent men engaged in agricultural education, recommended that there should be offered in each of the main departments of the college of agriculture a basic course which should be substantially equivalent in scope and value to the instruction in the corresponding subject as given in the best secondary agricultural courses and should be required only by students who have not taken such work before entering college. The plan contemplates that students entering college from approved secondary schools of agriculture may receive full credit for work satisfactorily completed and that they may be allowed to enter immediately the more advanced technical courses. The action of the University of California, as published in its recent announcement, indicates the tendency in this direction:

> Three new courses in general agriculture, one in each agronomy, animal husbandry, and horticulture, will be offered and may be taken as elective work throughout the freshman year and the first term of the sophomore year. Students who have completed satisfactory high-school work in agriculture will not ordinarily take these three college courses and will therefore have more time for other college work.

There is a growing disposition on the part of the colleges of agriculture to accept work in vocational agriculture at full value toward satisfying the requirements for admission. The faculty of New York State College of Agriculture, for example, has adopted the following resolution bearing upon this subject:

> A vocational diploma in agriculture or home making from the University of the State of New York, or evidence of equivalent vocational training, will be accepted for admission to the New York State College of Agriculture. If the applicant does not present three units of foreign language, he shall elect the equivalent amount of work in the university in one or more of the following subjects: Foreign language, English, mathematics, philosophy, psychology, history, economics, political and social science.

From the reports available it is shown that 20 States grant full credit for the agricultural work done in approved high schools. Many others allow as high as four units of credit for such work.

Modifications in curricula.—During recent years there has been a disposition on the part of a number of the larger colleges of agriculture to allow students the greatest freedom of choice in the matter of

specialization. Students have not only been allowed to specialize in subjects like animal husbandry or horticulture, but in many institutions they have been permitted to carry their major work in such narrow lines as horse raising, sheep husbandry, fruit growing, vegetable growing, plant breeding, microbiology, soils, etc. It is interesting to note a decided reaction toward the limitation of specialization.

The University of California, for example, has reduced the number of major subjects in the college of agriculture from 17 to 6. In keeping with the same general policy, this institution has stricken 40 courses from the list offered by the college of agriculture. The instruction contained in these courses is now organized in 18 new courses, making a net reduction of 21. It is the belief of the authorities that this reorganization of instruction will obviate excessive duplication and reduce the number of small classes and prevent overspecialization.

On the other hand, many colleges continue to introduce new courses to meet the advanced requirements of professional groups. New York State College of Agriculture, for example, has recently introduced specialized courses for fertilizer salesmen, poultry judges, and bee keepers. The University of Wisconsin also has introduced specialized courses for boys' and girls' club leaders, and for county demonstration agents. Such courses, however, have a definite aim and, taken with other related courses in the curriculum, serve to make the instruction more comprehensive rather than to restrict its scope.

There is also a tendency on the part of the colleges of agriculture to require more work in economics and sociology, and to bring about a closer relationship between the instruction in economics and that in technical branches and more particularly the instruction in farm management. The New York State College of Agriculture has united the departments of rural economy and farm management and has established a new department of rural social organization in which five new courses are offered.

The course designated "agricultural relationships," as offered last year for the first time by the Kansas State Agricultural College, is also an attempt to give the student a knowledge of the whole field of agriculture from the economic standpoint.

The one, two, and three year subcollegiate curricula, as offered by many of the colleges, are still very popular despite the rapid development of agricultural courses in high schools. Massachusetts Agricultural College has established a two-year curriculum to meet the demand for instruction of this nature. Connecticut Agricultural College has shortened its two-year curriculum by reducing the number of months in each session from nine to five, and has raised the minimum age from 16 to 18 years. Although of a secondary nature, such courses meet the need of men of mature years who are

not willing to attend classes with students of secondary school age. The tendency in the colleges is to limit more and more the enrollment in these curricula to mature students.

Agriculture for women.—Possibly as a result of the interest in agricultural pursuits developed by women during the war, there has come a demand on the part of women for collegiate instruction in this subject. Some of the colleges have already responded to this demand and many women students are now enrolled. The Massachusetts Agricultural College, for example, has introduced a limited amount of work in home economics for the benefit of young women who desire training for agricultural vocations. At the University of Wisconsin 12 women students taking agriculture are members of the first agricultural women's association ever formed, and through it propose to encourage women who are in attendance at the college of agriculture.

Training teachers of agriculture.—Teacher training has now become an important feature in the program of the colleges of agriculture. A number of the institutions have offered courses for teachers for several years, but previous to the passage of the Federal vocational education act the work was not seriously considered except in about six colleges. The past year, however, has seen the development of a well-planned teacher-training curriculum in each of the remaining institutions. As an example of the rapid development of this work, attention is called to the fact that at the University of Missouri the agricultural teacher-training curriculum was established in 1918–19 and that during the following year 164 students were registered for the work. Thirty-five colleges, out of 50 reporting, enrolled 540 students in special teacher-training curricula. Of this number, 262 graduated in 1920.

Many of the colleges have also offered short special courses for the training of teachers in agriculture. Some of these courses were planned for the purpose of supplying the needed technical information to persons who already possessed the necessary professional training and teaching experience, while others were designed for agricultural graduates who needed the professional training in education to qualify for teachers' certificates.

The salary problem.—The colleges of agriculture have suffered as much, or even more, than some of the other colleges as a result of the peculiar economic conditions resulting from the war. Their teachers, who, even before the war, were barely able to support themselves and their families with comfort, have been drawn from the service in large numbers. The salaries offered by outside concerns and the unusual opportunities in farming enterprises have been so alluring under the stress of circumstances that even the spirit of consecration

and institutional attachment have not been strong enough to hold many members of the several teaching faculties.

In several States maintenance appropriations were increased sufficiently to provide for a general advance in salaries, but in many cases such increased appropriations were barely sufficient to take care of the increased expense resulting from the advance in the cost of supplies and equipment. In many cases serious curtailment in the purchase of supplies was necessary to provide for the increase of salaries of individuals whose services could scarcely have been spared. Twenty colleges out of 35 reporting made general advances in salary during the year. Such advances range from 10 to 30 per cent. The colleges of Colorado, New York, South Carolina, and Tennessee have reported 30 per cent advances for full professors and proportionate increases for teachers of lower rank. New Mexico reports an average advance of $200 and Oklahoma $400 for teachers of all ranks. Florida and Maine report a flat increase of $300 for full professors and proportionate increases for teachers of lower rank. Wisconsin reports average increases of from 15 to 27 per cent, according to rank.

New buildings and equipment.—On account of the fact that only 12 legislatures held sessions during the period covered by this report, relatively few appropriations have been made for new buildings. In a number of cases where funds are available for this purpose building operations have been postponed on account of the high cost of labor and materials. Several colleges report that hundreds of students have been turned away on account of inadequate laboratory, classroom, or dormitory facilities. Short winter courses in some institutions have been abandoned because of lack of dormitory facilities.

The institutions have suffered also on account of inability to buy the regular amount of equipment and supplies, owing to the decreased purchasing power of their appropriations, and, as noted elsewhere, several colleges were forced to use funds intended for this purpose to increase the salaries of certain members of the faculty whose services otherwise would have been lost.

AGRICULTURE IN SECONDARY SCHOOLS.

Number of schools teaching agriculture.—The development of vocational agriculture in the secondary schools was somewhat hampered during the war on account of the shortage of qualified teachers, but the past year has been marked by remarkable progress in this direction. The total number of public secondary schools reported as giving vocational work in agriculture during the year is 1,797. Of this number, 1,179 receive aid from the Federal Government

under the provisions of the vocational education act. This shows a gain of 316 over the preceding year, when 863 schools received Federal aid. Equally striking is the growth in the enrollment of agricultural students in these schools. The enrollment for 1919 was 19,933, compared with 27,755 for 1920, showing a gain of 7,822.

Part-time schools of agriculture.—It should be noted, in addition to the enrollment of all-day students, as shown above, many of the schools have held part-time or evening classes. Such classes were reported in 139 centers during the year. These classes are intended mainly for men of mature years or those who have passed school age. Generally they are held at night and extend over a period of from 6 to 12 weeks. One class in Georgia was composed of 38 students, ranging in age from 15 to 60. Thirty of these pupils were over 21 years of age, and 19 were over 30 years of age. This class met three times a week over a period of three months. The instruction was of a general nature and included supervised practice or home-project work, mainly in corn and cotton growing. One student was a woman who carried on a vegetable project.

Improvement of teachers in service.—On account of the rapid development of this work it has been necessary to employ many teachers whose qualifications have not been up to standard. To make up for such deficiencies and to insure professional improvement among teachers, many States have employed one or more itinerant teachers whose duties consist in the visitation of the several schools for the purpose of assisting the agricultural instructors and strengthening their teaching ability. Thirteen States report that at least one man has been engaged on full time for such work, and two report that half the time of an instructor from the college has been provided for. In other States the agricultural supervisors devote a good deal of attention to professional improvement of teachers.

EDUCATIONAL HYGIENE.

In the summary of educational hygiene in the report for the year 1918–19 it was stated that "in no former year has so much, so varied, and so far-reaching work been done in the field of educational hygiene." The emotional intensity caused by the war was at full tide, and the projects thus initiated were going ahead proportionately. During the year just ended there has been some decrease of emotional intensity and evidence of a wholesome tendency to deal in a constructive critical way with new plans and programs—the field of educational hygiene. On the other hand the momentum generated during the war period is working steadily and without serious abatement both in long-established channels and in the channels newly

broken out. Gains have been consolidated and fruitful new lines of effort have been extended.

STATE LEGISLATION.

In the summary of last year it was shown that 14 States had enacted special laws for physical education since 1915. By revision of the school code two other States had made some provision for physical education without special legislation. The volume of new legislation in the past year has been small. Only 11 State legislatures were in regular session. Four of these have enacted legislation which more or less effectively initiates State-wide programs of physical education. The following 20 States now have physical education:

(1) Legislation enacted prior to 1919: Illinois, New York, New Jersey, California, Delaware, Rhode Island, Nevada, Maryland.

(2) Legislation in 1919: Maine, Oregon, Washington, Indiana, Utah, Michigan, Alabama, Pennsylvania (the two last by revision of school code).

(3) Legislation in 1920: Kentucky, Mississippi, Virginia, Georgia.

In Virginia the legislation is backed by administrative appropriations of $25,000 to the State board of education for physical education, and $25,000 to the State board of health for child welfare and school medical inspection. The law authorizes local public authorities to appropriate funds for the health examination and physical education of school children and the employment of school nurses, physicians, and physical directors. Appointments are to be approved by the health commissioner and the State superintendent of public instruction.

The laws passed in the other three States follow the general lines of the Virginia law, but do not carry the same degree of compulsion in requiring the establishment of physical education by local school committees. A director of physical education has been appointed in Kentucky. It is probable that similar appointment will be made in Mississippi in the near future. The Mississippi law does not become operative until Federal funds shall be made available for the assistance of the State in carrying on the work.

PENDING FEDERAL LEGISLATION.

The Smith-Towner bill, as is well known, includes physical education as one of the five major objects for which Federal aid shall be extended to the States.

The Fess-Capper physical education bill (H. R. 12652; S. 3950) was introduced into Congress February 20, 1920. This bill is the result of two years' work on the part of the National Committee on Physical Education and of the successor of that committee, the

National Physical Education Service, in the interest of Federal legislation. Senator Capper in introducing the bill indicated its purpose as follows:

> Physical education means more than exercise. It includes adequate supervision of the health and physical condition of the children and practical instruction in the principles of healthful living. Great pains have been taken in the preparation of the bill to make sure that State autonomy is abundantly safeguarded. Certain minimum requirements must be met by the States before Federal assistance can be given. States must appropriate sums equal to the amount received from the Federal Government and each State must establish physical education on a State-wide basis.

The initial appropriation asked for is $10,000,000. Payments to States are to be based upon the principle of allotting $1 per child of school age as shown by the decennial census.

The action of the Mississippi Legislature, noted above, in delaying the operation of its physical education act until Federal assistance shall be available emphasizes the importance of the Fess-Capper bill.

INTERDEPARTMENTAL SOCIAL HYGIENE BOARD.

The initial activities of this recently established Federal board were described in the report of last year. Through its educational research and development fund this board is making a very important contribution in the field of educational hygiene. Under the terms of the act creating the Interdepartmental Social Hygiene Board this fund, in conforming with regulations established by the board, is paid to universities and other suitable institutions and organizations "for the purpose of discovering and developing more effective educational measures in the prevention of the venereal diseases." In fulfillment of this purpose the board has assisted selected institutions to establish departments of hygiene which shall coordinate and integrate in one department or service the teaching of informational hygiene, individual health examination, consultation, and conference; the physical training activities; the emergency care of students in clinic and infirmary; the sanitary supervision of the various parts of the institutions; and the development of a hygiene consciousness in the institution as a whole.

Instruction relative to the venereal diseases must be integrated—not submerged—in the composite program of hygiene, "emphasizing with appropriate and due proportion and with proper tact and persistency the serious importance of the venereal diseases, their causes, carriers, and prevention."

During the past year 28 normal schools, colleges, and universities have cooperated in this way with the Interdepartmental Social Hygiene Board. Up to July 1, 1920, the appropriations had been made to 12 other institutions to assist them in establishing such de-

partments. This total of 40 includes 16 exclusively for training of teaching (normal schools or colleges for teachers), 15 State universities, 8 endowed colleges or universities, and 1 medical school.

The following statement of the results of the first year's work in one of the cooperating schools is typical:

We feel that the net result of the year's work has been to—

1. Improve materially the health, both mental and physical, of a goodly number of students.

2. To stimulate an intelligent interest in health knowledge.

3. To convince a large number of them that systematic exercise is a sine qua non of good health.

4. To establish among them, or at least to have made beginnings toward the establishment, of an honest, wholesome attitude toward the question of sex and an intelligent appreciation of the venereal disease problem.

SEX EDUCATION.

The joint activities of the Public Health Service and the Bureau of Education in the interest of appropriate sex instruction in the high school has continued along the lines reported last year. State and regional conferences and sex education in high schools have been organized. Information has been secured by questionnaires answered by more than 6,000 high schools as to the need of sex instruction in the high school, the extent of such teaching at present, and the matter and method of such instruction. A pamphlet is in preparation which will embody not only the results of this study but also the results of the work of a special committee formed in the spring of 1919 to prepare a manual on sex instruction in the high school.

PROGRESS OF HEALTH EDUCATION.

In the spring of 1920 the Bureau of Education sent a questionnaire to about 10 per cent of the schools of the country to ascertain the extent of health education throughout the country and particularly to what extent the plan of health education started by the bureau a year before was used.

The Bureau of Education received 4,016 answers to questionnaires. Forty-eight per cent of the schools showed health teaching of some sort. Thirty-two per cent used classroom instruction of one kind or another and textbooks and sent up clamorous calls for more and better material. Nineteen per cent weigh and measure the children according to the plan suggested by the Bureau of Education.

A few, of course, struggle against cruel handicaps, especially in rural localities and where the curriculum is crowded, but the majority of educators seem anxious and ready to devise ways and means of procuring life more abundant for the American school child, and making it part of their manifold duties to see that he knows how to live a healthy and a happy life.

A relatively small percentage of these schools, 1.9 per cent, reported medical inspection, and seventy-two hundredths of 1 per cent have nutritional clinics and feedings.

Comment on the situation received through the questionnaire has been sometimes discouraging or unenlightened, but the general spirit is one of quick cooperation, and often original methods of health education have come to light.

The section of the country quickest to adopt modern health education in the schools has been, according to these reports, the West. Utah stands out bravely at the head of the list, with 72 per cent of her schools doing weighing. Iowa comes next with 54 per cent of the schools using the height and weight standard for child health. Minnesota is third with 31 per cent of her schools weighing the children. And so the States come up with a will out of their welter of ignorance and irresponsibility toward physical young America.

VOLUNTARY ORGANIZATIONS.

Brief summaries of some of the more important activities of voluntary organization in the field of educational hygiene are shown.

(1) *National Physical Education Service.*—The National Physical Education Service was established about two years ago by the Playground and Recreation Association of America. The creation of this new service resulted from a request by the National Committee on Physical Education formed in the spring of 1918. The National Physical Education Service is actively engaged in promotion of State and Federal legislation for physical education. It has contributed largely to the success of the State campaigns for physical education legislation, and is directing the movement for Federal legislation.

(2) *The Child Health Organization of America.*—This organization continued its work along the lines indicated in our 1918–19 annual report. Their general health program stresses five particular points: (1) A scale in every school; (2) time allowed in every school day for the teaching of health habits; (3) a hot school lunch available for every child; (4) teachers trained in normal schools to teach health habits; (5) every child's weight record sent home on the monthly report card.

They have published an attractive child health alphabet, a health reader, and other literature on health education.

Cho-Cho, the health clown, has traveled from coast to coast demonstrating the value of teaching health through fun and make-believe. The picture man, a clever cartoonist, and a health fairy are also sent out by this organization and have met with great success.

A special conference of well-known educators was called by the child-health organization last December to suggest a program of

child health adapted to the work of the elementary grades and high schools. As a result of this conference a bulletin entitled "Further Steps in Teaching Health" was prepared for the Bureau of Education and printed on the Government presses.

In order to create a wider interest and secure from a large circle suggestions for a modern health syllabus to meet the needs for health teaching in all grades, a $1,000 fellowship, including one year's study in modern health work at Columbia University, was offered for the best graded plan on modern health teaching. The results of this contest will be made available in a short time for the use of superintendents of State and city schools.

(3) *Modern Health Crusade.*—Reports from over the country indicate no less than 6,000,000 enlistments of children as Modern Health Crusaders through the performance of the health chores.

During 1919–20 the Modern Health Crusade was adopted on a State-wide basis as obligatory or authorized curriculum work throughout Maine, Alabama, Tennessee, Indiana, Wyoming, Idaho, and Utah. The crusade has been officially adopted also in the District of Columbia, in Alaska, and in hundreds of cities and counties outside of the seven States.

Under the policy of a progressive program the Order of the Round Table has been re-created for Modern Health Crusaders after a plan worked out by the National Tuberculosis Association in consultation with other national organizations engaged in child-health work. The new order is designed to stimulate interest in physical and athletic fitness. The boy or girl to be admitted to the Round Table earns points by demonstrating athletic ability; by passing weight, posture, and physical examinations; and by obtaining a high grade in health studies. The standards are those set by the Child Health Organization, the Playground and Recreation Association of America, the American Posture League, the First Aid Division of the American Red Cross, the Boy Scouts of America, the Girl Scouts, and the Camp Fire Girls.

The National Tuberculosis Association desires to make the movement a means of bringing to the schools improved methods of health instruction. Correlation of crusade work with such studies as English composition, history, arithmetic, and civics, as well as with hygiene, has been readily carried out.

The Record of Health Chores is now published in primary, standard (intermediate), and senior editions, corresponding to grades 1 to 3, 4 to 6, 7 or 8, and to the higher grades. With the three editions of chores as foundation, schools may at their discretion add features of the program set forth in the crusade manual, thus affording a further progression through the grades. The manual, a 32-

page booklet, may be obtained from the National Tuberculosis Association, 381 Fourth Avenue, New York.

(4) *Committee on Health Problems in Education of the National Council of Education.*—The committee reports completion of its study and report upon health improvement in the rural schools. It also reports that a study of standards of health norms and health defects of school children is being conducted. A report on this practical and important matter, supported by our joint health committee, promises to add greatly through improved uniformity of findings and methods to the practical health work for the school children of the entire country.

CIVIC EDUCATION.

The interest in civic education stimulated by war conditions has persisted since the armistice and has resulted in widespread efforts to make training for citizenship both universal and effective.

State after State has enacted legislation relating to the subject. The school laws of some of the States have for years required the schools to give instruction in "patriotism," or "citizenship," and to include civics and American history in the course of study. Since the war began, however, a majority of the States have enacted legislation for the Americanization of our foreign population. In addition to this, at least a third of the States have, in this period, enacted laws expressly or by implication calling for more emphasis upon civic training in the schools. Some of these laws are very explicit, requiring continuous civic training throughout the elementary and secondary grades and, in a few cases, as in New Jersey, specifying such recently developed subjects as "Community Civics" and "Problems of Democracy" for the high-school years.

Appropriate administrative action on the part of State departments of education has followed in many cases to give effect to the new laws. In other cases such action has been taken without special legislative authorization. Pennsylvania, New Jersey, New York, Iowa, and Utah are examples of States that are thoroughly revising their courses of study with civic training as a conspicuous objective. Pennsylvania has created a special State supervisor of civic education, and a number of States have directors of the work as it applies to the foreign population.

State action, however, represents only a small part of the effort in this field. A constantly increasing number of local school systems are recasting and vitalizing their courses of civic training. Among the significant tendencies of this reconstruction are: (1) Provision for continuous civic training through all the years of school life; (2) the organization of civic training and instruction, especially in

the elementary grades, around the normal interests and activities of the children themselves; and (3) the reorganization of the social studies in the secondary school period, including history, with a view to their more direct application to the interpretation of present-day problems.

The emergencies of the war opened the doors of the schools to a wide variety of activities, initiated for the most part by agencies outside of the schools. An astonishing capacity on the part of Young America for service that counts in time of national need was disclosed. Since the close of the war, the schools have properly sought to resume their normal educational function. But the experience of the war period has left the conviction with many school authorities that the normal educational function of the schools can be more effectively performed and their work greatly enriched by utilizing, with wise discretion, many of the activities begun during the war. A resolution was adopted by the National Education Association at its meeting in July, 1920, recognizing the educational value, and especially the civic educational value, of the programs of activity and of service introduced into the schools through the medium of outside agencies, and urging the schools of the country to utilize these programs to the fullest extent possible.

The Bureau of Education has issued this year a Teacher's Leaflet (No. 8) under the title of "Civic Training Through Service." This leaflet is descriptive of the program of the Junior Red Cross, whose peace-time slogan furnishes the title for the leaflet, is explanatory of methods by which this program may be utilized by the schools, and is typical of the movement referred to in the preceding paragraph. The significant thing, however, is the favorable response that this leaflet has evoked from the schools, and the commendation it has received in this country and abroad from those who see the necessity of sound civic training as a factor in world reconstruction.

The Bureau of Education has also published, with the cooperation of the Junior Red Cross, a series of "Lessons in Civics for the Six Elementary Grades of City Schools," for which there is already a large demand indicative of the prevalent interest in the subject.

The new interest manifested in civic education is by no means confined to the schools and to such civic organizations as the Red Cross, the National Security League, the Boy Scouts, and others. The activity of the Greater Terre Haute (Ind.) Club is typical of the interest of similar organizations in many cities. This club is urging a course of instruction in civics for the schools, homes, offices, and workshops of its city. It sent out a letter of inquiry to 100 representative cities to ascertain what other cities are doing in the same direction. A summary of the replies received from 60 cities was published in School Life, September 1, 1920. These replies indicate

widespread interest, though they give a very inadequate idea of the actual achievement in some of the cities mentioned.

The new interest in civic education is not attributable to the war situation entirely. One of the most potent influences for civic training is the acquisition of the suffrage by women. The women of the country are conducting a vigorous compaign, not only for their own education in matters pertaining to the exercise of the suffrage, but also for the extension of civic education to all through the medium of the schools and other agencies.

EDUCATIONAL LEGISLATION.

With the exception of several special sessions held for the most part to consider the woman-suffrage amendment to the Federal Constitution, the number of legislatures in session in 1920 was the small number usual in even-numbered years. Aside from the six States whose legislative bodies meet annually, there were only five, Kentucky, Louisiana, Maryland, Mississippi, and Virginia, which held regular sessions in 1920. Including the enactments in States whose legislatures met in special session, the mass of school laws enacted this year was comparatively small.

There has been enough legislation, however, to disclose the usual tendencies and also any trend toward new policies and undertakings. The work of a single legislative session will usually serve to show a measure of progress and something of what the friends of the schools are attempting in the way of improvement.

As the reader within the past two or three years has read principally of teachers' pay, a better system of school support, health education, "Americanization," and, in general, of a cry for more and better education in every respect, so these phases of education which have been foremost in public print and in the minds of the people have proved the principal subjects of legislation. Laws affecting teachers' salaries and the training of teachers, increased State appropriations for schools and revisions of tax limitations, provisions for physical training and other health education, requirements of school attendance through longer terms and longer periods of child life, efforts toward the enhancement of vocational efficiency, measures designed to promote "Americanization" and a stronger sense of civic responsibility—these and like measures constitute the main body of school laws going into present-day statute books.

TEACHERS' SALARIES.

Several States in 1920 showed their appreciation of the importance of adequate pay rates for teachers. While other excellent laws in this field were enacted within the last year, that of New York prob-

ably deserves first rank, since it carries a large increase of State participation in school support and embodies an elaborate salary schedule for all the elementary and high-school teachers of the State. The act as passed makes a State appropriation of $20,550,000 for the purpose of increasing salaries. The following is quoted from a summary prepared by Frank B. Gilbert and published in a recent bulletin of the New York State education department:

The salary of each teacher employed in a common school district under the provisions of this act shall not be less than at the rate of $800 for a term of 40 weeks. This means at least $20 a week, and is effective for the school year beginning August 1, 1920.

In addition to the regular district and regular teachers' quotas, the quota under this act to a district employing more than one teacher is $250 for each full-time teacher. Districts employing but one teacher and having an assessed valuation of over $100,000 will receive a quota of $200. Districts employing but one teacher and having an assessed valuation of $100,000 or less shall receive a quota of $200 and in addition $2 for each entire $1,000 that the assessed valuation is less than $100,000.

Where teachers are employed for a school year of less than 40 weeks, the quotas will be reduced proportionately.

In union free school districts of over 4,500 population having a superintendent of schools the minimum salary for elementary teachers is $1,000 and for high-school teachers is $1,150. The number of increments in each case must be not less than eight. The quota under the new bill is $350 a teacher, which is in addition to the regular district and regular teachers' quotas.

In union free school districts of less than 4,500 population maintaining an approved academic department, the minimum salary for elementary teachers is $800 and for high-school teachers $900. The number of increments in each case must be not less than eight. The quota is $300 a teacher.

In districts not maintaining an academic department the salary must be at least $800 for the school year of 40 weeks. The quota is $250 a teacher, if employing more than one teacher.

All union free school districts maintaining academic departments must file schedules of salaries effective August 1, 1920, which shall be not less than those prescribed in the bill. Quotas will not be apportioned unless such schedules are filed with the department.

It must appear that each teacher who has been retained in the school since the school year 1918–1919 is being paid for the school year beginning August 1, 1920, at least the amount of the quota apportioned under this law on account of such teacher in excess of the salary paid under the schedule or contract in effect March 1, 1919.

Where new positions are created and additional teachers employed they must be paid according to the schedules adopted and filed.

Other provisions of the law relate to quotas for cities and are similar to those for common school districts and union free school districts, except that higher minimum salaries are specified, and quotas are larger.

The minimum salary law of Indiana, which bases minimum rates of pay on the grade made by the teacher at examination and on successful experience in teaching, was amended at a special session of

the legislature in 1920. The effect of the amendment is to raise the minimum for each of the classes defined. For beginners, the pay hereafter must be at least equal to the amount obtained by multiplying 4½ cents by the general average made by the teacher on his examination for a certificate. For those with successful experience, additional amounts are provided in proportion to the years of service, and 2 per cent is added to the teacher's average grade for attendance upon the county institute. Teachers exempted from examination will under this act receive not less than 6½ cents multiplied by their respective general averages. No salary of any teacher in the common schools will be less than $800 in any year. In commenting on the new rates of pay, State Supt. L. N. Hines notes the increasing disposition on the part of the people to appreciate at its true value the work of the teacher.

In Mississippi, the legislature of 1920 enacted legislation designed to provide equal terms for all the common schools in so far as the State funds go. Under this equalization plan State aid to the common schools has been increased all the way from 5 per cent to 200 or 300 per cent in the various counties. State Superintendent W. F. Bond now claims for Mississippi the distinction of leading all the other Southern States in the matter of teachers' salaries.

A Kentucky act of 1920 fixes a minimum salary of $75 per month for all public-school teachers. This is more than double the minimum heretofore paid in some of the counties. Maryland also provided increases for teachers, and New Jersey raised the pay of helping teachers in the counties and instructors in the normal schools. At a special session of the Texas Legislature, an appropriation of $4,000,000 was made to increase teachers' salaries.

PUBLIC SCHOOL SUPPORT.

A subject vitally related to teachers' salaries is the more general subject, public school support, for salaries can be raised only when more funds are provided. Reference has been made already to the State appropriation of more than $20,000,000 in New York and to the enlarged amount of State aid in Mississippi. Several States this year proposed to increase their school funds by means of amendments to their constitutions. In Georgia it is proposed by an amendment to remove the restriction on taxation for high schools. The present constitutional provision auhorizes "taxation over the whole State" for "educational purposes in instructing children in the elementary branches of an English education only." The proposed amendment would remove this restriction of the applicability of school funds to the elementary grades.

The Louisiana Legislature of 1920 proposed two educational amendments to the Constitution of that State. One of these (Act

No. 51) raises the limit of special maintenance taxes which may be voted by a parish (county) or a school district from 5 mills to 8 mills, and fixes the school funds in New Orleans at 7 mills on the parish assessment. The other proposed amendment would provide an additional State school tax of 1 mill on the dollar. A proposed amendment in Virginia would remove the constitutional limitation on local taxation for school purposes and leave to the legislature the matter of fixing such tax limits. Virginia also increased the State appropriation for schools by more than $1,000,000. A constitutional change proposed by the Kentucky Legislature provides that 10 per cent of the State school fund be distributed to counties and cities otherwise than on a per capita basis. The purpose of this proposal is to create a fund with which effort may be stimulated and opportunity equalized in the several counties.

The South Carolina Legislature changed the law of that State both as to State contribution to school support and in relation to local taxation. The annual State appropriation for the schools was increased more than $200,000, and a new maximum district tax limit of 15 mills for the maintenance of the common schools was fixed. The legislature also adopted a resolution providing for a joint committee to study the tax system of the State. The Legislature of Rhode Island made a similar provision. It provided for a commission to make a survey of school finance, both revenues and expenditures, and to report in 1921. Some other States, as, for example, Georgia and Kentucky, provided for higher rates of local taxation.

School-support conditions in this country, in general, remain about as in other years, particularly since the advent of high prices. The need is for more school funds, and the tendency is to provide them. Another tendency is, as heretofore noted in publications of the Bureau of Education, toward increased participation by the larger units, State and county, in the support of the schools. As the people many years ago progressed from the idea of individual parental effort to the broader conception of community cooperation in the provision of education for the child, so in more recent years they would appear to be progressing to the still broader view that the State itself should be the principal agency in school-fund provision.

HEALTH EDUCATION.

As the European war made clear the need of more and better education on the mental side, so the want of adequate physical fitness in our young manhood was revealed by the same agency; and in consequence schools are now to take up more vigorously the task of promoting proper physical functioning. In 1919 seven States—Indiana, Maine, Michigan, Oregon, Pennsylvania, Utah, and Wash-

ington—passed laws designed to provide more definite programs of physical training in the schools, and in 1920 Georgia, Kentucky, Mississippi, and Virginia adopted similar measures.

The Georgia act requires physical education in all normal and public schools. The amount of such training must be at least one-half hour each school day. The Kentucky act provides for physical education as a part of the school course in all of the schools of the State. It requires the State university and normal schools to give courses in physical education, and after July 1, 1921, all graduates of teacher-training departments in these institutions must have completed one or more of the required courses.

The physical education bill which was passed by the Legislature of Mississippi carries a provision that makes it inoperative till Federal legislation is enacted on the subject.

Physical training and the medical inspection of school children are provided for in the Virginia statute. Under its provisions the State board of education is to emphasize the need of physical fitness, employ a State director for the work, and cooperate with the several school divisions in carrying out a well-ordered plan of training.

COMPULSORY ATTENDANCE.

No field in education, with the possible exception of school revenues, has in recent years been more prolific of progress as regards legislative provisions than has compulsory school attendance. Within the past decade the seven States which had previously enacted no laws on the subject all enacted initial requirements, and they and various other States have by this time made their laws stronger and extended their application. The last of the States to make the initial requirement was Mississippi, whose first attendance law was passed in 1918. This law, however, was of the local-option type and was otherwise inadequate. An act of 1920 displaces the older law and puts more effective provisions in force. It is Statewide in application and requires all children between the ages of 7 and 14 years, inclusive, to attend school four months in each school year.

A Kentucky act of the current year provides for the appointment of attendance officers and makes attendance compulsory up to the age of 16, unless the youth has completed the work of the eighth grade of the elementary schools. Exemption is made of certain lawfully employed minors between the ages of 14 and 16.

In the matter of compulsory attendance, an anomalous condition obtains in Virginia, for a constitutional provision, designed, no doubt, to promote legislation on the subject, has in recent years had a prohibitive effect upon any proposal to require children over 12

years of age to attend school. This provision is section 138 of the constitution of 1902, and authorizes the legislature, in its discretion, to "provide for the compulsory education of children between the ages of 8 and 12 years." The legislature of 1920 proposed an amendment designed to remove this limitation.

AMERICANIZATION.

Strictly speaking, this term should apply to the process of Americanizing aliens, or foreigners, who come to our country to live. But this restriction of the word has met with some objection, and, besides, there are not a few people of American birth and residence in whom sufficient intelligence and a proper sense of civic responsibility have not been developed, hence the word tends toward a wider significance than merely "Americanizing" the foreign born. This tendency may be seen, for example, in several bills now before Congress in which the instruction of immigrants and the elimination of illiteracy among the native population are linked together. "Americanization" will accordingly be used here for those legislative measures which in effect will promote a more vigorous and intelligent sense of civic respsonsibility, a closer identification of the individual with American interests and aims. Several laws of this class were enacted in 1920.

A New Jersey act (ch. 197) authorizes the board of education of any school district to establish and maintain a class or classes for the instruction of foreign-born residents over 14 years of age. This instruction is to embrace the English language, the form of our Government, and the laws of New Jersey and the United States. The State commissioner of education is to have general supervision and direction of the work, and teachers of the classes are to receive apportionment of State and county funds.

Rhode Island acts of 1920 require attendance officers to enforce the Americanization law of 1919, and increase the State appropriation for Americanization work. In Massachusetts, under an act of 1920, American history and civics must be taught in all public elementary and high schools. The aim of this law is better fitting for the duties of citizenship.

A Georgia act of 1920 legalizes the expenditure of county school funds for training illiterates, and in Mississippi a biennial appropriation of $25,000 is made for the purpose of encouraging "industrial education, sanitation, and good citizenship" among the Negroes. An extension agent operating from Alcorn College (colored) is provided for this purpose.

While not strictly coming under the head "Americanization," laws of Maryland and Mississippi may be mentioned here as being "patriotic" in aim. The former State now requires the "Star

Spangled Banner" to be sung in certain schools each day, and the latter requires that the United States flag be displayed at public school houses during school hours.

SCHOOL ORGANIZATION.

The machinery of school administration, State, county, and district, is a constant subject of legislation. In State organization the tendency would seem to be toward a State board of education composed of some five, six, or seven members appointed by the governor, or made up principally of appointive members, and a principal school officer appointed by such board and designated "commissioner of education." The Virginia Legislature of 1920 proposed an amendment to the State constitution designed to remove from that instrument the enumeration of powers and duties of the State board of education and to vest in the legislature the authority to prescribe the board's functions. This is in keeping with other proposals of the recent legislature of that State, which would take various statutory provisions out of the constitution and leave them to legislative discretion.

The Legislature of Kentucky also proposed an amendment relative to the State department of education, but in this case it is the office of State superintendent that is affected. The amendment provides that the State superintendent may be appointed instead of elected, and, if elected, may succeed himself. At present this officer can not be his own successor, no matter how efficient or popular he may prove to be. In Rhode Island the title "commissioner of education," under an act of 1920, displaces "commissioner of public schools" for the principal school officer of that State. At a special session of the Delaware Legislature, the "new school code" of 1919 was amended in various particulars. One of the more important changes provided for the appointment of the commissioner of education for a term of one year instead of two years, as formerly, and that officer's functions were somewhat more restricted.

In county administration, Kentucky and Virginia passed noteworthy acts in 1920. The former State created in each county a nonpartisan county school board of five members, elected at large and authorized to establish districts and appoint county superintendents and teachers. The Virginia act is a proposed constitutional amendment which would give to the legislature more discretion in determining the unit of local school administration.

CONGRESS AND EDUCATION.

Hardly any Congress in recent years has had before it more numerous and important educational measures than has the Sixty-

sixth Congress. Chief among these were the "Smith-Towner bill," or "N. E. A. bill," providing for a Federal department of education coordinate with the other 10 departments of the Government and for Federal aid to common-school education: the "Americanization bill," providing for the Americanization of immigrants and the elimination of illiteracy among the native born; the "physical education bill," providing for Federal aid to the States in providing health education; and the "vocational rehabilitation bill," providing for the rehabilitation of persons disabled in industry or otherwise. The last-mentioned measure passed the two Houses and was approved by the President June 2, 1920. It appropriates $750,000 for the fiscal year ending June 30, 1921, and $1,000,000 for each of the three succeeding years to promote the "rehabilitation of persons disabled in industry or in any legitimate occupation and their return to civil employment." These sums are to be allotted to the States in the proportion which their respective populations bear to the total population of the United States, not including Territories, outlying possessions, and the District of Columbia, but no State is to receive less than $5,000, and additional appropriation is made to provide this minimum allotment. The appropriations must be expended in accordance with the following conditions:

(1) States or local authorities therein must expend at least an equal amount; (2) State boards must annually submit plans for the approval of the Federal board; (3) State boards must make annual reports to the Federal board; (4) no Federal moneys shall be expended for buildings, equipment, or lands; (5) courses shall be made available as directed by the rules and regulations of the Federal board. Any State, in order to receive the benefits of this act, must (1) accept its provisions; (2) designate its State board for vocational education to cooperate with the Federal board; (3) provide for cooperation between its State board for vocational education and its board for the administration of the workmen's compensation act, where the latter exists; (4) provide for the support and supervision of the courses; and (5) designate its State treasurer as custodian of funds. The Federal Board for Vocational Education is empowered and directed to administer this act.

GENERAL EDUCATION BOARD.

The financial operations of the General Education Board, according to the report of the treasurer submitted to the Secretary of the Interior, for the year ending June 30, 1920, were as follows: The income for the year amounted to $4,741,223.66. The income carried over from the preceding year, after adding sums refunded, amounted to $9,996,875.85, making a total of $14,738,099.51 available for dis-

bursement. Of this sum $3,631,027.99 was disbursed, leaving a balance of $11,107,071.52. The statement of appropriations for the year is as follows—For whites: Universities and colleges, $17,039,307.72; medical schools, $9,304,247.73; professors of secondary education, $91,291.63; rural school agents, $80,817.17; Lincoln School, $497.201.52; State agents for secondary education, $116,100. For Negroes: Colleges and schools, $1,579,000; medical schools, $257,500; rural school agents, $71,837.50; summer schools, $28,400; county training schools, $160,000; expenses of special students at summer schools, $15,000; Negro rural school fund, $65,000; John F. Slater fund, $4,500; critic teachers, $9,000. Miscellaneous: General survey of educational conditions and needs in North Carolina, $4,000; increases in salaries of State agents, $40,000; model county organization, $7,400; conferences, $4,546.72; National Committee on Mathematical Requirements, $25,000; vocational arts survey, $60,000; division of educational relations, $10,000; educational investigation and research, $6,000. Total, $29,476,149.99.

In addition to the foregoing the sum of $9,475 was appropriated from the income of the Anna T. Jeanes fund for Negro rural schools, making a combined total of $29,485,624.99.

On January 1, 1920, the last installment of Mr. Rockfeller's gift from his special fund of approximately $10,000,000 was transferred by the University of Chicago in trust to itself. All control of the board over this fund having ceased, it is now eliminated from the board's books.

LIBRARY ACTIVITIES.

GENERAL TENDENCIES.

The keynote of the program which American librarians have set before themselves during the past year has been mobilization for reconstruction and for general service in time of peace, just as in previous years they mobilized for the library war service. The war service brought libraries and library organizations into a national prominence which they had not before enjoyed, and a determination is felt to retain the position gained and to utilize it for greater service in peace activities. The most conspicuous evidence of this determination has been the movement for an enlarged program for the American Library Association and the appeal for funds to finance this undertaking, which is still in progress at this writing. Librarians are convinced that in the supply of suitable books and other printed material to all classes of the community they have a service to perform which is essential to the welfare and true progress of our country.

The extraordinary conditions during and following the war have disarranged library staffs by drawing off many of the best assistants, who have found opportunity to win larger returns in other occupations. In this respect the experience of library workers has been analogous to that of the teaching profession. Notwithstanding these disadvantages, the libraries have continued to function vigorously and even to extend their work, and the public circulation of books has been maintained at a high level.

COUNTY LIBRARY PROGRESS.

The county library plan continues to be in favor and was adopted by a number of additional States in 1919 and 1920. The States enacting county library laws for the first time at their 1919 legislative sessions were Alabama, Illinois, and Utah. Minnesota and Oregon passed new county library laws superseding previous statutes. Important amendments to the county library laws of Texas and Wisconsin were also made in 1919. The county library system was introduced into Kentucky and New Jersey by legislative enactment in 1920. The Kentucky law permits the establishment of a library on petition from the freeholders of all parts of a county without requiring an election, and contains provisions for an adequate tax. It also provides for making arrangements with a library already existing to extend its service to the county. The New Jersey law provides that upon the vote of the people of a county a county library may be established for those districts in the county not already maintaining free public libraries, and that such districts as are already maintaining free public libraries may become a part of the county library system and benefit therefrom upon request. A tax rate with a fixed minimum is provided in the law.

In 13 States not now having county library laws library workers are reported to be planning the introduction of bills for county service in the next legislature. These States are Arizona, Arkansas, Colorado, Georgia, Idaho, Kansas, Nevada, New Mexico, North Dakota, California, Tennessee, Virginia, and Washington. The last-named State is temporarily without a county library law, because its 1915 legislature, in revising the former library law, unintentionally omitted the word "county."

New England is the only large section of the United States in which the county library idea does not take root. The cause of this is that in New England the people think in terms of the township (or town as it is called there), not of the county.

Utah has made a record for rapidity in establishing county libraries, having established 10 of them during the first three months after May 6, 1919, when the Utah county library law went into effect.

Of the 58 counties in California, the number having county free libraries has now reached 44.

The total number of States having county library laws of some form is now 26, as follows: Alabama, California, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Utah, West Virginia, Wisconsin, and Wyoming. There is great diversity in the provisions of these laws, some of them merely authorizing a contract for county service with a library already existing, and some of them make the establishment of county libraries so difficult that little has been accomplished under them.

CERTIFICATION OF LIBRARIANS.

The movement for standardization of library training and for certification of librarians has made further progress during the year. The proposed plan for an enlarged program of the American Library Association contained a provision for standardization of qualifications and national certification of librarians. In the absence of any national system, various State library associations are taking action looking toward the adoption of plans for standardization and certification. Plans for the certification of librarians of all public libraries except the very smallest were adopted by the New York State Library Association and by the Iowa Library Association at their meetings in 1919. The plans provide for different grades of certificates for life and for limited periods, based on education, training, and experience of the candidates, similar to the certificates granted to teachers. In New York the plan is to be administered by a State board of library examiners under the direction of the board of regents. New York is now the only State which has the legal power to hold examinations for librarians and grant certificates. Action under the Iowa plan can have only an advisory authority. A committee of the Minnesota Library Association has reported a plan for certification which the 1920 meeting of the association is expected to adopt. These systems are not retroactive, but apply only to librarians hereafter to be appointed.

California has a system in operation for examining and certifying librarians for county libraries. In Massachusetts the State library commission gives optional examinations to candidates who wish its recommendation. A bill for the certification of librarians passed by the Ohio Legislature was vetoed by the governor, and similar bills have been introduced in the Legislatures of Illinois and Indiana, but not brought to final action.

SALARIES OF LIBRARY WORKERS.

In view of the present inflated prices for the necessities of life, the question of increases in salary for library workers remains pressing and a subject for serious discussion at library conferences. At the meeting of the American Library Association at Colorado Springs, Colo., in June, 1920, the address of the president, Chalmers Hadley, was entitled "The American Library Association and the library worker," and brought out with emphasis the interest of the association in maintaining the salaries and other working conditions of library employees at a proper level. The library workers are coming to appreciate the strength which organization gives to their cause. The question now demanding attention is the kind of organization best adapted to them, whether the library unions affiliated with the American Federation of Labor, which have been formed in some places, or other organizations which insist upon the professional character of library work.

A new organization just established and called the "Library Workers' Association" is designed to assist members who are not graduates of library schools, but whose professional standing is based on their actual experience. The association will serve its members as an employment bureau and will work in cooperation with the American Library Association. The new association is gaining considerable support among the constituency to which it makes its appeal.

In the public libraries of many cities the salary rates for library workers have been advanced during the past year. In New York City a salary campaign under the lead of the New York Public Library Staff Association accomplished a notable success in inducing the city administration to include the library workers in the increases of salary granted to city employees by the board of estimate and apportionment.

The report of the Joint Congressional Commission on the Reclassification of Salaries of Government Employees, submitted to Congress in March, 1920, recommends a revised scale of salaries for librarians in the District of Columbia which constitutes a distinct improvement over present conditions. The report also provides means for the presentation of grievances and for the rectification of inequalities found to exist. Nevertheless, librarians considered the salary schedule allotted to them unjust because it fell below the allotments made to other scientific, technical, and professional employees of the Government whose education, training, and general professional qualifications were no higher than those required from library workers. Accordingly the library advisory wage committee has given careful study to the subject and has prepared a substitute library reclassifica-

tion, which it is hoped the commission will adopt as correcting the inequities of the original schedule.

STATE LIBRARY COMMISSIONS.

The library interests of every State need the leadership and encouragement which are afforded by a State library commission or similar agency. Thirty-nine of the States now have either a regular library commission or some official body performing functions equivalent or similar to those of a library commission. In 28 of these States there is a regular library commission. These are all independent bodies, with the exception of the Massachusetts Free Public Library Commission, which is now a division of the State department of education, and the State public library commission of North Dakota, which is now connected with the North Dakota Board of Administration, the department which under present law has charge of all the educational interests of that State. Two of these commissions—those of Arkansas and Colorado—are not provided with any appropriation to carry on active work. In each of two States—Connecticut and Rhode Island—there is a State library committee, appointed by the State education department, to look after public library interests. Alabama has a State department of archives and history, with a library extension division. In Minnesota the former State library commission is now the library division of the State department of education. Tennessee has abolished its former library commission and now has a division of library extension in its department of public instruction.

In the following six States the State library exercises the functions of a library commission: California, New York, Oregon, Pennsylvania, Utah, and Virginia. The library commissions are giving energetic attention to the library's part in the work of educational reconstruction following the war. They cooperate in a League of Library Commissions, an organization affiliated with the American Library Association. There is a movement on foot to organize library commissions in those States which now lack them. Bills to establish library commissions were introduced into the Legislatures of Lousiana and South Carolina at the 1920 sessions, and the Louisiana measure was enacted into law. The following nine States are still without library commissions: Arizona, Florida, Mississippi, Montana, Nevada, New Mexico, South Carolina, West Virginia, and Wyoming.

A number of important changes in the executive officers of State library commissions have occurred for the current year. In place of Thomas M. Owen, deceased, Mrs. Marie B. Owen has become director of the State department of archives and history of Alabama.

Nellie Williams becomes secretary of the State public library commission of Nebraska in succession to Charlotte Templeton, who is now secretary and organizer of the Georgia Library Commission. Irving R. Bundy succeeds Elizabeth B. Wales as secretary of the Missouri Library Commission. Matthew S. Dudgeon, who has become librarian of the Milwaukee Public Library, is succeeded as secretary of the Wisconsin Free Library Commission by Clarence B. Lester. Other new appointees are S. Blanche Hedrick as director of the North Dakota Public Library Commission and Leora J. Lewis as field librarian of the State free library commission of South Dakota.

NEW LIBRARY BUILDINGS.

The close of the war has been followed by a revival of activity in the erection of library buildings for both public and institutional purposes. The completion and formal opening of the new Detroit Public Library building is expected during 1920. It is hoped also that Philadelphia may make good progress in erecting its new library building, and that one wing of the large building planned for the Brooklyn Public Library may be completed. Cleveland is awaiting the erection of a public library building, for which $2,000,000 in city bonds have already been issued and for which a second issue of $1,500,000 is expected. A bond issue of $1,000,000 is to be made for a library building for Minneapolis, to be placed on a spacious site already provided. Providence, R. I., is also planning a library building to cost more than $300,000. A new building for the Wilmington (Del.) Institute Free Library, for which a fund of $325,000 is available, is also under construction. Plans are under way for a building at Sacramento, Calif., to house the State library and the supreme court, which will cost nearly $2,000,000.

The new general library building of the University of Michigan was dedicated with appropriate exercises in January, 1920. Leland Stanford Junior University has a fine new library building, completed in 1919, at a cost of $700,000. The new library building of the George Peabody College for Teachers, at Nashville, Tenn., is the gift of Andrew Carnegie, at a cost of $180,000. A new library building is planned as part of the enlargement of Teachers College, Columbia University, New York City. It is to be a six-story building costing about $1,500,000, of which about $1,000,000 has been appropriated by the General Education Board. The Iowa Legislature, at its 1919 session, appropriated $300,000 for erecting the first wing of a library building for Iowa State College at Ames. Yale University also is contemplating the erection of a new library building. A new education building was recently dedicated at the University of Texas, Austin, containing a special room for the Wrenn library. This

library was originally owned by John H. Wrenn, of Chicago, and was purchased for $250,000 for the University of Texas by Maj. George W. Littlefield, who also donated funds to furnish a suitable room for the collection in the education building.

A project which has met with approval in many communities is the construction of library buildings as memorials to the men who served in the World War. The General Assembly of Virginia at its 1920 session passed a bill providing that if the city of Richmond will donate a suitable site, the State will erect thereon a memorial library building at a cost not exceeding $2,000,000. The building will also contain an auditorium as well as appropriate memorial tablets and trophies of Virginian soldiers.

Another bill passed by the Virginia senate, but not by the house, provided (*a*) for a system of local libraries by giving the boards of supervisors of any county, or the council of any city, power to levy an annual tax of not exceeding 2 mills for providing a memorial library building and for its maintenance; (*b*) for State aid annually in the sum of $500 to any locality spending a similar amount, except that in places of over 10,000 population a similar expenditure by the State was authorized up to a limit of $5,000.

This plan to establish a system of public libraries throughout Virginia to commemorate the services of Virginians in the World War has been unanimously indorsed by the executive committee of the American Legion of the State. It is intended to bring the matter up again in the next general assembly.

The plan for library buildings as memorials to soldiers and sailors has been taken up in many cities and towns throughout the country. A $150,000 memorial library for Mobile County, Ala., is proposed. Other cities for which memorial libraries are under consideration are Cincinnati, Los Angeles, and Wilkes-Barre and York, Pa.

PART II.

ACTIVITIES OF THE BUREAU OF EDUCATION.

FUNCTIONS OF THE BUREAU.

The act which established the Bureau of Education provides that it is "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country."

The bureau has no direct administrative duties except those involved in the education, support, and medical relief of the natives of Alaska, and in approving expenditures of funds appropriated by the Federal Government for the colleges of agriculture and mechanic arts which receive aid from the Federal Government. As far as the moneys appropriated to it by the Congress will permit, the bureau attempts to carry out the spirit of the act quoted and to function as an agency of information, of advice, of research, of organization, of opinion, and of propaganda.

In the report of the Commissioner of Education to the Secretary of the Interior for the year ended June 30, 1915, five lines of work which the bureau was then carrying on were set forth. Briefly, these were to gather and disseminate accurate and comprehensive educational data, to serve as a clearing house for the best opinion on educational matters, to advise with persons interested in education, to promote desirable educational tendencies, and to conduct and direct experiments in education. Except for some interruption during the war period, the plans announced at that time have been steadily followed. They will be here repeated more fully to serve as a background upon which to show the efforts of the bureau for the past fiscal year.

I. A CLEARING HOUSE FOR EDUCATIONAL INFORMATION.

The bureau attempts, first, "to serve as a clearing house for accurate and comprehensive information in respect to all educational agencies

and all forms of education in the United States and all foreign countries, and to disseminate this information among school officers, teachers, students of education, and all others directly interested in any form of educational activity." In attaining this end the bureau does by far the larger and more important part of its work in the regular routine of daily duties at the offices in Washington. By means of letters of inquiry, questionnaires, personal interviews, voluntary reports from school officials and others, and studies of original documents it gathers facts and makes the information thus gained available to the public in the form of pamphlets, bulletins, circulars, and letters to individuals and to the press.

CORRESPONDENCE.

During the year there were received at the Washington office alone 166,746 letters, 45,828 library publications, and 58,287 forms of various kinds. This does not take into account any of the mail matter received at the various research stations and by special agents and at bureau offices other than those in the Pension Building. This is a decrease from the figures of the year 1918–19, an unusually active year because of war conditions. It is more than eight times the volume of the bureau's correspondence in 1910.

PUBLICATIONS.

Although the increased cost of printing caused its appropriation for that purpose to be exhausted early in the year, the bureau published 62 bulletins, 1 annual report, 1 annual statement to the Secretary of the Interior, 6 library leaflets, 2 health education publications, 4 kindergarten circulars, 5 higher-education circulars, 1 reading course, 1 community center leaflet, 8 School Garden Army publications, 1 school-extension leaflet, 24 numbers of School Life, 4 numbers of Americanization, and numerous reprints and miscellaneous documents. The circulation of School Life is approximately 40,000. Its subscription list is composed almost wholly of the names of members of boards of education, superintendents, principals, and teachers. It is a semimonthly school periodical whose columns are devoted to current educational items of interest and to discussions of educational problems both in the United States and foreign countries.

With the cooperation of the National Geographic Society, a Geographic News bulletin to be used as an aid in teaching geography and history was published weekly for the greater part of the school term. It reached a circulation among teachers of 70,000.

STATISTICS.

In 1918 an arrangement was begun by which the educational statistics of each State are to be collected through the State departments of education. This arrangement was completed. Seven chapters of the statistical report for the year 1917–18, those dealing with summer schools, schools for the deaf, blind, and feeble-minded, industrial schools for delinquents, private high schools, and State school systems were compiled and printed. The five chapters on normal schools, nurse-training schools, private commercial schools, public high schools, and city school systems were compiled, but have not yet come from the press. A chapter on colleges, universities, and normal schools and a review chapter of the entire report are not yet completed.

In this report, more than has been the practice heretofore, the important points of educational practice have been focalized in diagrams and graphic representations. A text has been added to clarify the report and explain the methods employed in arriving at certain statistical data and conclusions.

A directory giving the name and location of all the more important educational agencies and the names and addresses of administrative officers in education throughout the United States was compiled and published.

LIBRARY WORK.

The bureau maintains an educational library of 175,000 volumes and pamphlets for the use of its own workers and the general public. As far as is possible with its fund of $500, the library is kept supplied with the most valuable and up-to-date books, periodicals, pamphlets, and reports on education in several languages. In 1919–20 1,244 volumes were added by gift, exchange and purchase. Copyright transfers from the Library of Congress were 390 volumes; serial numbers accessioned were 3,520; periodical numbers, 8,358; received from the bindery, 656 volumes.

Visitors and research workers are welcomed at the library. Reading tables are arranged for their convenience. During the year 810 calls of consultation were made by people from without the bureau. Volumes are loaned on personal or written request. Two thousand one hundred and fifty-one loans were made, mostly to people outside of the city of Washington.

The library keeps at hand a steadily increasing list of bibliographies for distribution. One hundred and twelve of the earlier lists were revised during the year and 84 new ones were added. In addition there were prepared by the library and published six leaflets, giving lists of references on vocational education, teachers' salaries,

the project method in education, education for citizenship, consolidation of schools, and student self-government.

LIBRARY INFORMATION SERVICE.

As an indirect result of the European war, public libraries all over the United States were awakened to the part which the publications of the National Government might and should play in the lives of the people. In order to encourage acquaintance with these publications the Library Information Service in September, 1919, issued a bulletin entitled "The Federal Executive Departments as Sources of Information for Libraries." The bulletin contains brief accounts of the work performed and the kinds of printed matter prepared in the 10 executive departments of the Government.

The general character of the printed matter and the sources from which it emanates having been indicated, the next step was to assist librarians in obtaining the documents which they desired and to call their attention to publications of special interest. The bureau has sought to perform this service to the best of its ability.

ASSISTANCE TO RETURNED SOLDIERS.

Shortly after the close of the war the bureau took up the work of informing returned soldiers of the opportunities offered them by universities, colleges, and other schools.

It was found that within six months after the end of hostilities over 40,000 discharged soldiers had written to the Secretary of the Interior to say that they were interested in his plan to provide work and farms for them. Incidentally, his plan proposed educational opportunities for the ex-soldiers while they were reclaiming the lands they expected to own as farms. Finally, the number writing to the Secretary in regard to the reclamation plan reached a figure above 150,000. While awaiting necessary legislation it was decided to give the first 40,000 inquirers information concerning the special courses arranged for them in the summer schools of the agricultural and mechanical colleges. A separate circular was prepared for each State, so that each one of the 40,000 received something specific about the opportunities offered by his own State institution. Subsequently similar information was compiled relating to short winter courses in the agricultural and mechanical colleges. To answer the many inquiries, circular letters were prepared and sent with such printed matter as was applicable. The large edition of Higher Education Circular No. 12—"Opportunities at College for Returning Soldiers"—was soon exhausted in answering these inquiries. Many soldier letters were forwarded to the bureau by the chief of the rehabilitation division of the Federal Board for Vocational Education. Before the

end of 1919 that division had on file more than 250,000 letters from soldiers needing vocational training. The rehabilitation act provided for the reeducation or vocational training of men who had been discharged from the service with a disability, but the impression had prevailed throughout the Army that all discharged soldiers would be entitled to free vocational education. This caused thousands of able-bodied ex-soldiers to apply to the Federal Board. The Bureau of Education attempted to give helpful information to as many of these ex-service men as possible. The student enrollment in universities and colleges for 1919–20 was the largest in the history of the country, and included many thousands of former soldiers of the World War. It is, however, a regrettable fact that many thousands more were not financially able to resume their school or college courses, interrupted by the war.

HIGHER EDUCATION.

In gathering and arranging information for the field of higher education the bureau completed the work on a bulletin on "Statistics of Agricultural and Mechanical Colleges, 1917–18," which is now in press. It examined, with a view to possible publication as bulletins or higher-education circulars, a large number of manuscripts, of which the following have been accepted and published, or are still in press: "The Rhodes Scholarships, 1919–20"; "How Much Does Higher Education Cost"; "The Rhodes Scholarship, 1920–21"; "The Ohio Plan for the Training of Teachers and the Improvement of Teachers in Service"; "Training Teachers of Agriculture"; "The University Extension Movement"; "Class Extension Work in Universities and Colleges of the United States"; "Public Discussion and Information Service of University Extension"; "Administration of Correspondence Study Departments in Universities and Colleges"; "The Junior College"; "Correspondence Study in Universities and Colleges"; "Development of Agricultural Instruction in Secondary Schools."

The following listed bulletins, prepared for distribution, have been completed and are ready for the press: "Opportunities for Graduate Study at American Universities"; "Opportunities for the Study of Engineering in the United States"; revision of the bulletin on "Opportunities for Foreign Students at Colleges and Universities in the United States"; "Statistics of State Universities and State Colleges, 1919."

Information has been gathered from the colleges and universities concerning the growth and status of the teaching of Slavonic languages and literatures in the United States; general intelligence tests; the teaching of history and citizenship courses in normal schools, col-

leges, and universities; forestry instruction; and the evolution of the land-grant college curricula. This information will serve as the basis for several circulars and brief bulletins.

RURAL EDUCATION.

Twelve and a half millions of children are enrolled in the rural schools of the United States. How they shall be best taught, how their teachers shall be trained, how the rural schools shall be organized, how their courses of study shall be made most nearly to meet the needs of rural life, and how the education of these children shall differ from that given in cities and towns are all problems of greatest importance in rural-school work. The bureau has studied and reported on such topics as the following:

1. A study of consolidated schools in the United States. This is a report based upon reports of investigations by committees appointed by the State authorities in the various States. It is the most exhaustive study of this important question. Its early publication is especially desirable.

2. A study of the legal provisions for the certification of teachers in each of the States.

3. A study of county libraries based on the ability and need of each county in the United States.

4. A study of worth-while schools from material furnished by certain schools designated by State departments as doing unusually good work.

5. A study of the salary of county superintendents as compared with the salaries of 1916.

6. A study of high-school dormitories in connection with rural high schools in sparsely settled communities.

7. A study of standardization of rural schools as practiced in the various States and the methods employed of awarding State aid for effort in this direction.

8. A study of the salary of all the rural-school teachers in three counties in each of the States. This study has given for the first time a basis for the discussion of rural teachers' salaries as compared with the salaries of other teachers.

9. A study of the shortage of school-teachers in the United States. This study revealed 18,000 schools closed and 42,000 schools taught by substandard teachers. These figures have been accepted as the basis for the Nation-wide discussion of the teacher shortage.

10. A study of the shortage of high-school teachers, which revealed the fact that there will be a need in September, 1920, of at least 15,000 adequately prepared high-school teachers in excess of the visible supply of such teachers.

CITY SCHOOL SYSTEMS.

Informative studies and publications of a general character on city school systems for the year have been few in number because the members of the bureau engaged in that work have devoted much of their time to educational surveys. The schools of villages and towns have been studied and definite and active attempts made to further kindergarten education. Bulletins were prepared and distributed as follows: Administration and Supervision of Village Schools; Schools in the Bituminous Coal Regions of the Appalachian Mountains; Kindergarten Housing and Equipment; and Training Little Children. The bulletin entitled "Training Little Children" contains the series of articles furnished to newspapers by the National Kindergarten Association. The circular entitled "The Child and the Kindergarten" consists of 28 pictures of children engaged in kindergarten activities, with a text which is a running commentary on the pictures. Another circular presents the kindergarten as an effective Americanization agency, and the leaflet entitled "How to Arouse Public Interest in Kindergartens" is No. 1 of a series of extension leaflets. The remainder of the series are in course of preparation, and will contain the kindergarten statistics for 1918. There is to be one for each of the 48 States giving the status of the kindergarten in that State.

Material relating to kindergarten extension has been prepared and distributed in the form of:

1. Ten thousand circular letters sent to kindergarten teachers inclosing practical suggestions for extension activities.

2. Suggestions for those who wish to write kindergarten articles for the press.

3. Requests for reports for Americanization work sent with the Kenyon Americanization bill.

4. Tentative plans for State kindergarten associations.

5. Two kindergarten broadsides containing popular articles on the kindergarten, sent to 5,000 newspapers.

6. Americanization leaflets sent to a mailing list of 25,000 chambers of commerce.

7. An illustrated pamphlet on the kindergarten published in 15 foreign languages and distributed in cooperation with the Young Women's Christian Association.

Other studies begun but not yet completed deal with "The Development of Teachers' Councils," "Certification and Qualifications Required of Junior High School Teachers," "School Practice in Dealing with Gifted Children," and "A Primary Curriculum."

HOME ECONOMICS.

There has been arranged for distribution a complete list of all higher institutions offering home economics work. Material relating to National and State laws affecting home economics teaching has been secured and partly prepared for publication. A questionnaire concerning the status of home economics teaching in public elementary and secondary schools was sent out and the returns in part tabulated. There were prepared for publication bulletins on "Reorganization of Home Economics Courses in Secondary Schools" and "Rural School Lunches."

SCHOOL HYGIENE.

In promoting the cause of public health through the care of the health of school children the bureau has prepared, or caused to be prepared under its supervision, five special studies. These are:

1. A study of school janitor service, based upon questionnaires sent by the bureau to all the cities in the country. This work has been completed within the year, and the manuscript made ready for press.
2. A study of school health supervision. This is based upon questionnaires sent to State, city, and county school authorities, from which more than 2,000 returns were received. The material has been analyzed and classified, and the report is ready for final revision.
3. A study of the one-story school buildings. A letter of inquiry has been sent to the school officials in municipalities where one-story school buildings are known to exist. The study is still in progress.
4. Study of the age-weight-height-grade standards for elementary school athletics. This study has been undertaken by the extension division of the University of Indiana in cooperation with the Bureau of Education.
5. A study of health examinations and physical education in colleges and universities in cooperation with the Society of Physical Directors in Colleges.

TRADE TRAINING.

The National Association of Accredited Commercial Schools requested the cooperation of the bureau in the preparation of standardized courses of study for use by the member schools of the association. In the preparation of these courses it was endeavored to keep in mind two things, namely, the assured ability of the better business schools of to-day to train for business by the use of standardized courses of study, and the consequent gain thereby to these schools and to business which they would and should efficiently serve. These courses have been submitted to all private business

schools on the mailing list of the bureau with the hope that they might be found helpful in standardizing the work at this time of increasing need for better training to meet the new demands of our expanding trade.

Material has been gathered for a descriptive and statistical statement upon the business training courses of Young Men's Christian Association schools, and a report in cooperation with the educational director of this association is now in course of preparation.

It has not yet been possible to print the two reports upon the foreign-trade training surveys that were undertaken. The survey has been finished in 12 of the 15 major cities included in a survey to be carried on in cooperation with the Committee of Fifteen on Educational Preparation for Foreign Service and the Association of Urban Universities. A report upon the results thus far secured was prepared and submitted at the annual meeting of the Association of Urban Universities in Boston, December 12, 1919. The survey of 250 cities with a similar object, which is being conducted direct from the bureau in cooperation with local city school superintendents, is of such magnitude that no complete report can be made before the end of the present fiscal year. The report upon educational preparation for foreign service for use in higher institutions has been completed and advanced for printing as a bulletin of the Bureau of Education. This bulletin has been prepared in collaboration with university specialists and others who speak with authority upon the several subjects naturally included in a course of study in preparation for foreign service.

FOREIGN EDUCATIONAL SYSTEMS.

In treating of foreign educational systems the bureau kept steadily in view the tasks of delineating the changes and developments in the education of foreign countries wrought by the World War and of interpreting them in such ways as should be most useful to American teachers and to the steadily increasing numbers of general readers interested in the currents of international education. It is believed that during the period under consideration educational departures were attempted and effected, especially in the more advanced countries of Great Britain, France, and the Scandinavian countries, which have great ducational value for the future American educational polity. This is especially true in the fields of physical and hygienic instruction and adult, continuation, and municipally supported vocational education; the maintenance of the supply of teachers in rural schools; the systematic increase of teachers' salaries; and the establishment of equitable pension systems for teachers.

The publications along these lines have been:

1. *Schools of Scandinavia, Finland, and Holland.*—In addition to the résumé of school organizations, general movements, and the

effect of the war on school work, special attention was devoted to school excursions in Denmark, the communal middle school of Sweden, home and locality as a school subject, school gardens, and school-welfare activities in Norway.

2. *Education in Switzerland.*—In addition to the general résumé of conditions and characteristics, there were discussed health measures as applied in the schools and the practical trend in school work taken during the biennium, with the expansion of preschool service for young children and post-school service for folk-school graduates, and its inclusion of teacher guidance in trades or business.

3. *Education in parts of the British Empire.*—General educational activities of the biennium 1916–1918 along traditional lines were covered, but especial attention was devoted to new movements, such as progressive instruction in agriculture, vocational work for returned soldiers, rural education and the maintenance of the supply of rural teachers, superannuation provisions for teachers, consolidation, short-term sessions, and reorganization of administrative units. Throughout, the diverse social, racial, and climatic conditions which go to affect all educational movements were duly considered.

4. *The schools of Austria-Hungary.*—In this were discussed State or local control of schools, reorganizations now pending, higher education, the teachers, the pupils, and the effects of the war.

5. *Educational conditions in Japan.*—Special developments in administration and curriculum of the middle schools, education of girls and women, and vocational and technical continuation schools were treated.

6. *Some phases of educational progress in Latin America.*—As most completely representative of South American education, the countries of Argentina, Chile, and Uruguay were selected to show tendencies of a general nature as well as movements in the awakening to illiteracy and the struggle against it, educational legislation since 1917, increasingly specialized training of teachers, and the development of rural schools, especially in remote territories. In the cases of Central America, Brazil, and Venezuela the treatment of the educational situation was purposely restricted to practical, vocational, and technical instruction in arts and crafts, these lines showing noteworthy progress.

7. *Natural science teaching in Great Britain.*—Report of the committee appointed by the prime minister to inquire into the position of natural science in the educational system of Great Britain. This report was at once upon its appearance recognized as possessing so many features of value to American education that the division was authorized to compile and adapt it for such use, omitting the portions applicable only to British conditions and needs.

In addition to the bulletins outlined above there was written Part II (pp. 135–176) of the Report of the Commissioner for 1919.

SCHOOL BOARD SERVICE.

Because of inadequate salaries and the high cost of living, the allurements of the business world, and in war time the desire to aid in governmental activity, the teaching force of the United States has been greatly depleted. The difficulty in finding teachers has been so great that in 1918 a school board service division was established to register teachers, especially those so certificated that they could move easily from State to State, and send their names out on request to school authorities.

Through lack of appropriation this service was inactive from July 1 to December 1, 1919, a period of five months, in the fiscal year 1919 and 1920. In December the work was resumed on a deficiency appropriation of $5,000. An assistant director, with the aid of a stenographic force of three, during the months of December, January, February, and March, rearranged the files of the division and sent a form letter to the 14,000 teachers who had registered in the previous fiscal year. The letter called the attention of each registrant to the reopening of the division, and asked him to reregister, add any further information he might wish to about himself, and signify whether or not it was his desire to be placed on a list of persons who wished to be actively engaged in teaching work and were available for positions. Another letter mailed to all universities, colleges, and normal schools offered the services of the bureau in securing competent instructors. A questionnaire was prepared and submitted to State superintendents of public instruction, in order to ascertain what State offices maintained teacher-placement bureaus, the status of the work, and the method of operation. The replies were tabulated and the tabulations mailed out in response to occasional requests for such information.

In April a director for this work and two assistants in teacher placement were appointed and the force increased to 10 persons.

By circular letter the aid of the bureau was offered to 20,000 high schools, public and private. The immediate response was a call for nominations for 985 teaching positions in the last 16 days of April and 4,101 in May. Approximately 5,000 nominations were made in response to 1,200 of these requests.

The registration files of teachers were steadily augmented by new names, and attempts were made to increase the list of well-trained, competent persons who might accept positions in any State. The division now has a file of approximately 6,000 active registrants.

A classification scheme for arranging the requests by subjects and kind of service desired was worked out. In addition, 5,600 cards

were made, on which was placed in condensed form all of the data which came to the division on the requests for teachers. From these there has been begun a study of the nature of the experience and qualifications in teachers more often asked for by school administrative officers and the salaries which they are willing to pay in order to secure the things for which they ask.

A request was sent to all of the State directors of vocational training in home economics, agriculture, trades, and industries in order to ascertain the qualifications necessary for teaching work under the Smith-Hughes law. The returns were indexed, filed, and partially tabulated.

II. A CLEARING HOUSE FOR EXPERT OPINION ON EDUCATION.

The second important function is "to serve as a clearing house for the best opinions on school organization and administration, courses of study, methods of teaching, and many other matters connected with popular education. For each of these subjects there are a few men and women in the United States and elsewhere whose opinions, because of their greater knowledge of the subject, are most valuable. This bureau tries to find for each subject who these persons are and to make lists of expert advisers whom it may consult and to whom it may refer others. It also undertakes, after correspondence and personal conference with these experts, to formulate the consensus of expert opinion. In carrying on this part of its work the bureau's experts attend and participate in congresses and conferences of educators." In the fiscal year 1919–20 a number of these were held.

It gathers the best opinion available through direct correspondence with individuals by means of questionnaires, by studies of the most important current publications on education, and by special conferences of experts on particular subjects, such as science in secondary schools; home economics in colleges; the better organization of agriculture in elementary schools, high schools, and colleges; health education; Americanization; education in trades and industries; school administration; and education in highway engineering and highway transport. The opinion thus gathered is given out through brief bulletins, addresses, and correspondence.

HIGHWAY ENGINEERING AND HIGHWAY TRANSPORT.

In recent years the National Government has encouraged better public highways by means of very large Federal appropriations contingent upon State and county appropriations. Because of this and because of the enormous transportation problems that arose during the war and which the railroads were not then and are not yet fully prepared to meet, a greatly awakened national interest has been

taken in highway transportation. The men who are trying to solve this problem feel keenly the need of trained workers along this line, and are asking that the colleges provide adequate courses in highway engineering and highway transport, and that a much larger number of young men be encouraged to enter them.

To aid in furthering this movement the bureau held a preliminary conference in Washington and took part in other conferences at Detroit and Ann Arbor. As a result of the Ann Arbor meeting the bureau called a national conference at Washington on May 14 and 15. There were present nearly 100 highway engineers, representatives of the State highway departments, automotive and tire industries, national highway associations and educators, who recommended definite plans for the use of colleges in furthering the interests of highway engineering and highway transport. At the request of the conference the Commissioner of Education appointed a permanent committee of seven members known as the Highway Engineering and Highway Transport Education Committee. The purpose of the committee is to develop a permanent organization working under the best direction to collect fundamental source material covering the entire field of highway engineering, highway transport, and automotive engineering and other cognate research problems for use in preparing suitable textbooks in highway engineering and highway transport. This work is being actively continued and expanded during the present year.

THE JUNIOR COLLEGE.

The last week in June the bureau held a conference of presidents and deans of junior colleges for the purpose of discussing and formulating policies for these institutions which are helping to solve some very important problems in the organization of higher education, and the number of which is rapidly increasing.

AMERICANIZATION CONFERENCES.

A national Americanization conference was held at Minneapolis May 16–18 to discuss educational phases of Americanization and their organization and administration in school, industry, and home. Two hundred and eighteen religious, civic, educational, and industrial bodies of 14 States were represented. The purpose of the conference was to put the Americanization work on a scientific basis. There were considered such topics as Federal participation; the creation of State departments of Americanization; State programs; State supervision; the place of the board of education in city-wide plans of Americanization; the duties of native-born, social, educational, and fraternal organizations in the city-wide plan; the Federal

course in teacher training; the course in English; and the industrial program.

At its close the conference adopted resolutions that Americanization be recognized as an educational, social, and economic undertaking; that it is the civic obligation of the public schools to assume the responsibility for selecting and training supervisors and paying teachers for the work; that the public-school equipment be used liberally for recreational purposes for the Americanization school; that the foreign born as well as the native born assume responsibility for the carrying out of the socializing phase of Americanization; and that the Federal Government cooperate with the several States in the education of the illiterates and other persons unable to understand, speak, read, or write the English language.

The Americanization conference held in Cleveland, Ohio, February 24 and 25, and attended by representatives from the different States, met to discuss the methods by which the Americanization work could be carried on successfully and to review the results obtained in the cities where it has been going on for some time. The Commissioner of Education emphasized the point that Americanization would always be an essential part of education. The general opinion of the conference was that the basic need of the country is to encourage teacher training and to formulate classes for that purpose. In New York State, as a result of the teacher-training work already carried on, it was stated, 5,000 teachers could be put into the work at that time. In Pennsylvania the results of an investigation of the industries to see what Americanization work was being carried on brought out the information that, of the 1,063 plants observed, 751 did some kind of Americanization work comprising welfare work, training in safety and first aid, social and educational departments. In Massachusetts cooperation between the Bureau of Naturalization and the Massachusetts Division of University Extension, through which the Americanization program was carried on, has been successful to the extent that 70 cities have practically adopted the State's program and increased the number of Americanization classes from 3,281 in 1918 to 9,030 in 1919. Other States have had varying success in their efforts, but all showed a tendency toward increased exertion in that direction.

SCHOOLS IN MINING TOWNS.

In November of 1919 a conference was held at Pittsburgh on problems of education in mining towns. It was attended by school principals, superintendents, and teachers, representatives of mining companies in western Pennsylvania and West Virginia, and welfare workers. The meeting considered such questions as vocational training in mining for boys 14 to 18 years of age and for adults; the

education of the miner's wife and daughters in home making; grouping mining schools for vocational training in mining; the feasibility of the all-year school; and better financial support for mining town schools.

VILLAGE SCHOOLS.

There are about 12,000 villages of less than 2,500 population in the United States. To consider the welfare of the schools in these was the purpose of a village conference held at Cleveland during the meeting of the department of superintendence of the National Education Association. The program comprised the topics relating to the village school course of study and to the general intellectual and social life of the village. Its advantages in opportunity for teaching practical lessons in civics, its possibilities for community music and drama, its health conditions, and its relation to the surrounding country were all subjects of discussion.

III. ADVISORY.

A third activity of the bureau is "to advise legislatures, school officers, teachers, and others engaged in promoting and directing education. Its experts, upon request, address legislatures, meet with legislative committees and commissions, with State, county, and city school boards, with boards of trustees and faculties of normal schools, colleges, and universities, with library commissions, and with other similar bodies. It makes or directs surveys of State, county, and city school systems, and of individual schools or groups of schools, and reports its findings, together with constructive suggestions, to the proper officials."

SURVEYS.

In the fiscal year 1919–20, 12 such surveys were made. Five of these were detailed and comprehensive. The largest and most difficult was an exhaustive inquiry into the entire public and private school system of the Hawaiian Islands. Members of the survey committee spent four months in the islands examining the conditions and the work of the schools. A preliminary report of four chapters that deals with problems of administration and reorganization was printed so that it might be used in a special session of the Hawaiian Legislature. The remaining chapters are now ready for printing. This study is of special interest because it is the first made of any of the insular possessions of the United States, and because of the problems involved in educating several racial groups that differ widely.

Another study was that made of the entire school system of the city of Memphis, Tenn. The difficulties incident upon establishing and maintaining a school system that could expand to meet ade-

quately the educational needs of a rapidly growing industrial city having a large proportion of Negro population were analyzed and constructive programs were submitted to the board of education. The report is issued in seven parts for general distribution. The field work of this survey was made in the fiscal year ended June 30, 1919.

Of equal interest but of an entirely different type is the school system of Winchester, Mass., a well-to-do city suburban to a big city. The bureau made a careful survey of this system. The report is not yet completed.

A complete and careful investigation of a small southern system of city and county schools as represented in the schools of the city of Brunswick and of Glynn County, Ga., was carried to completion. The report will soon be issued for general circulation.

At the request of the superintendent of a cotton mill at Erlanger, N. C., a detailed study of the mill village and its school was undertaken by the bureau. The survey of the school and village paved the way for the reorganization of the whole school system, based upon a course of study especially prepared for the children who live in the community. The State course was followed in the fundamentals and an application of these principles of education was made to the child's experience through a study of the various activities carried on in the mills and the village. The report of this work to be issued later will furnish suggestive material for a daily program in similar schools throughout the cotton belt.

Seven reports were made on some special phase of one or another school system.

A partial survey dealing only with the building and financial needs of the school department of Lexington, Ky., and accompanied by methods and plans designed to assist in a local campaign for increased bond issues was completed.

The examination of the business methods of the board of education of Augusta, Ga., and of the school department of the city and county in which Augusta is situated, was reported in typewritten form to the board of education. The report comprised a discussion of the financial situation, together with a series of forms carefully worked out in detail with a simple bookkeeping and accounting system for schools of the type to which Augusta belongs. In this the bureau had the help of the Bureau of Efficiency. It is proposed to print this report for general distribution after it has been so modified in details that it is more suitable to the school departments of the smaller cities.

Another study was made of adult education in Passaic, N. J. This comprised a first-hand examination of the social and industrial conditions obtaining in a manufacturing city with an unusually high per cent of foreign population, together with an examination of the

means and methods employed by the school department of that city in teaching English to adult foreigners. The report is issued as a bulletin of the bureau.

Surveys limited entirely to the building needs of the school departments were made of the cities of Meriden, Conn., and Gloucester, Mass.

The principle of consolidation as applied to the one-teacher school of a particular township, Mount Joy Township, Pa., was made as a type study. The report will soon be issued in printed form for general distribution.

A report was made, after careful investigation, to the board of education and board of estimates of Baltimore, Md., on the proposition of erecting a modern school building for the children and people of the Locust Point community. The school for this community had been partially destroyed by fire. The section of the city is one made up largely of foreign-born people, 1,400 or 1,500 of whom are of school age. Recommendations were made for a modern school building erected in a 10-acre park and with ample provision for assembly rooms, laboratories, and shops for the day school and continuation and part-time work, examination and clinic rooms for the use of school and community nurse, reading rooms and rooms for junior high-school work. The report will be published as an industrial education leaflet.

ADVICE IN REGARD TO SCHOOL LEGISLATION.

Through analysis, comparison, and interpretation of school laws, the bureau assists State legislatures in determining what the general legal status of any particular phase of education is and in enacting laws in the light of the best practice and experience. Each year a legislative circular, designed to show the progress and final disposition of proposed school legislation in State legislatures in session, is prepared and distributed to State departments of education and legislative committees. In 1919–20 this piece of work was done, and in addition a bulletin on laws relating to the adoption and supply of textbooks has been brought up to date; the study of public-school revenues previously begun has been continued and is now in a fair way to be carried to conclusion; a special study of continuation-school laws has been prepared; and various agencies interested in the promotion of improved State school legislation have been assisted as far as practicable. There has been completed and submitted for publication the biennial summary and digest of school legislation in the several States. This is a presentation in formal summary of all school legislation enacted by the legislatures of 1918 and 1919.

SCHOOL-PLANT CONSTRUCTION.

The bureau has the part-time service of a special agent who gives help in planning school plants so that they may be adequate, sanitary, and hygienic. This agent is stationed at the George Peabody College for Teachers, Nashville, Tenn. He has kept up a heavy correspondence relating to school buildings, supplied such bulletins on schoolhouses as the bureau had available, helped architects from various parts of the country in making plans and corrections, and had direct charge in an advisory capacity of constructing a number of school buildings. He has made trips to Johnson City, Livingston, Carthage, McKenzie, Hartsville, Green Brier, and Knoxville in Tennessee, to Paducah and Lexington in Kentucky, and to Albany, Montgomery, and Gadsden in Alabama for the purpose of counseling with school boards and school officers about selecting school sites, planning buildings, and advising in general with reference to the various problems of school equipment.

IV. PROMOTION.

Of perhaps a more constructive character than those already recounted is a fourth line of work carried on by the bureau. This is "to promote on its own initiative and to assist education officers and the people of the several States and local communities in promoting what it believes to be necessary and desirable tendencies in education and in the organization of educational agencies, to the end that there may be full and equal opportunity of education for all." Through its conferences, publications, and correspondence, and by means of addresses at meetings of educators and of citizens, and in consultations with visitors to the bureau, it has done definite work within the year for lengthening the average school term; more adequate salaries for teachers of all grades and kinds; better teacher training; aiding school officials in securing competent teachers; advancing education in agriculture, home economics, trades, and industries; adoption of the work-study-play plan in city schools; the increased use of visual instruction; better school plant construction; better health training; increased school revenues; training for citizenship; education in the home; home gardening; the reorganization of schools so as to give six years to the elementary school and six years to the high school, the six high-school years being divided into three years of junior high school and three years of senior high school; the organization of junior colleges to do thoroughly and well the work of the first two college years instead of attempting without sufficient means to do the full four years of college work; the consolidation of rural schools and the building of homes for teachers; and many other phases of education that experience has shown to be desirable.

A NATIONAL CAMPAIGN FOR EDUCATION.

During the last months of the year the initial steps were taken in a national popular campaign of "education for education." For some time it has been evident that there is need of a nation-wide awakening to a situation which threatens the very foundations of democracy.

Educators have been discussing various phases of the situation and have suggested remedies from time to time. In the belief that the citizens themselves, rather than educational experts exclusively, should have opportunity to consider these matters, I proposed a national citizens' conference on and for education. In addition to the appeal which you sent to the governors of the several States, invitations were sent to many organizations and individuals known to be interested in education.

The conference was held in Washington on May 19 to 21. Official representatives were in attendance from the Hawaiian Islands, the Philippine Islands, Porto Rico, and all of the States except four. The registration, though not complete, included 525 names, of which 266 were those of representatives of civic and commercial organizations, women's clubs, farmers' organizations, labor unions, editors, and official delegates appointed by the governors.

Of the 25 speakers scheduled for the five general sessions, only 9 were educators, while the remainder represented various civic, social, industrial, and political interests. A number of sectional meetings were arranged for the purpose of stimulating free and open discussion on the part of the delegates.

A national emergency in education.—That the Nation will have to spend two or three times as much money as it is now paying for education; that new sources of revenue and new systems of taxation will have to be discovered; and that immediate emergency measures will have to be adopted, were among the conclusions reached by the conference. The bureau was also asked to create a commission to make a special study of school-revenue problems.

With 110,000 vacancies assured in teaching positions in elementary schools in the United States this coming year, there will be only 30,000 graduates of teacher-training institutions to fill them, leaving a net loss of 80,000 trained teachers, according to figures presented to the conference.

Reports just received from the high schools of the country indicate that the situation will be even more serious in the high schools than in the elementary schools. One-fifth of the 84,000 teachers now in the high schools are reported as intending to leave their positions to enter some other occupation; 8,000 teachers will be needed to fill new positions created next year by the growth of high schools. The greatest possible number of new eligibles for high-school teaching is 9,000,

so that 15,000 of the 24,000 positions can not be filled by adequately prepared teachers.

National significance of the shortage.—This shortage comes at a time when the Nation can least afford to neglect education. The new conditions require that the schools shall be more efficient and more effective than they have been in the past, and we are faced with the danger that they may not be so effective as in the past. We are confronted with a great shortage of teachers, and there seems to be little chance of immediate relief. According to the most careful estimates that can be secured, between 300,000 and 400,000 children were deprived of schooling this past year because of schools closed as the result of shortage.

Even more serious is the rapidly growing number of substandard teachers. More than half the teachers of the Nation—350,000—are not prepared according to any reasonable standard for the work of teaching, a reasonable standard being understood to mean the minimum standard that progressive communities have long insisted upon—two years of professional training beyond the four-year high-school course.

A conservative figure for the number of new teachers that will be required this fall is 110,000. It is more likely to be 120,000, and it may reach 150,000. The number of graduates of normal schools this year is 25 per cent less than in 1916, or about 16,000. If we add to these the graduates from other schools who have had some instruction in teaching and school management, we shall have at the outside 30,000 prepared teachers to fill the vacancies, or a deficit of at least 80,000.

At the close of the conference a general committee on a statement of principles submitted a report in which it pointed out that education is the vital concern of every American citizen; that the number of children and young people seeking an education is constantly increasing and the number of competent teachers constantly decreasing; that since the welfare of the American citizen is a matter of concern equally to the Nation and the State, the National Government should assume a share of the financial burden of offering education, and that there must be provided everywhere more adequate educational funds.

SPECIAL CONFERENCE ON EDUCATIONAL CAMPAIGNS.

The next step was taken by calling a special conference on educational campaigns, to meet in Washington on June 25. There were present at this conference representatives of 34 national organizations, having a combined membership of several million persons, who unanimously promised hearty cooperation in and support of the proposed campaign.

After discussion, the conference adopted unanimously a report offered by the committee on resolutions. The report recites the urgent need for an adequate supply of properly prepared teachers, increased financial support for schools of all kinds, and an entire readjustment of educational programs to meet the demands of the new era.

The conference also went on record as favoring a consideration of the entire educational system of the country as a unit, the promotion of a comprehensive plan of extensive education, provision for more liberal support of teacher-training institutions, and the adoption of increased salaries for teachers.

The promotion of the national campaign for education and assistance in similar sectional, State, and local campaigns to the extent of its resources will constitute one of the major projects of the bureau during the coming year.

THE NORTH CAROLINA CONFERENCE.

As a result of the National Citizens' Conference on Education, held in Washington May 19–21, many similar State and sectional conferences have been planned. One of these was called by the Commissioner of Education and held at Greensboro, N. C., at the request of the governor and the State superintendent of public instruction of that State, the conference being held a few weeks before the meeting of the conference in Washington. The North Carolina conference was attended by a large number of State officials and educators and citizens interested in all phases of education, public and private. Resolutions were adopted looking toward a large expansion and better organization of the educational system of the State. Many county conferences have been held for the purpose of carrying these to the people and getting their cooperation.

OTHER CONFERENCES.

Somewhat more restricted in their scope and limited in their aims than the national conference were the conferences that were held in commercial, industrial, home economics, rural, higher, and agricultural education.

Commercial.—To meet the increasing demands of the business world for technically trained men and women, the commissioner called 12 preliminary regional conferences and invited representatives of normal schools, colleges, and universities and city school systems to discuss, first, commercial teacher training; second, college entrance credits in commercial branches; third, vocational commercial subjects in relation to general training or the local requirements of

business. Nine of these conferences were held between April 10 and June 4. The series was planned to include the whole of the United States.

Industrial and home economics.—Specialists engaged in training teachers of manual training and industrial education in the Mississippi Valley held a conference at the University of Cincinnati. Another such conference was held in Chicago. A meeting of home economics supervisors, lasting two days, was held at Cleveland, Ohio. The reorganization of home economics in secondary courses was the object of a three-day conference with members of the National Education Association who were serving as a special committee on that subject. The home-economics work in the schools of Grand Rapids, Mich., was discussed in a special meeting with members of the board of education of that city.

Rural.—Conferences on rural education were held at the following-named places; University of Virginia; State normal schools of Texas; Sioux Falls, S. Dak.; Cedar Falls, Iowa; Chandler, Okla.; Emporia, Kans.; Berea, Ky.; Durant, Okla.; Tahlequah, Okla.; Rio Grande County, Colo.; Castine, Me.; and Montpelier, Vt.

These conferences, most of which were attended by educators, statesmen, and representative citizens from the country at large or from adjoining States, were a continuation of an active campaign that has been carried on by the bureau for some years for the improvement of rural schools and rural community life. Special emphasis was placed on longer school terms, better paid and better prepared teachers, the elimination of illiteracy, consolidation of schools wherever practicable, and a course of study based on the needs of country life. The conference at Cedar Falls was devoted almost entirely to the consolidation of schools and has already had valuable results.

LECTURES AND ADDRESSES.

It does not seem necessary to attempt a detailed account of the addresses given by members of the bureau to all kinds of educational gatherings and to mass meetings of citizens, and occasional series of lectures at various institutions throughout the United States. It is deemed sufficient to say that to the extent of the rather limited traveling fund and in so far as other duties permit, bureau members attend at, take part in, and help at all kinds of educational gatherings. Participations of this kind number well into the hundreds each year and constitute one of the regular means by which the bureau promotes educational lines of thought and activity that it believes to be desirable, gives help and advice, and keeps up contact with the live, working educational world.

CITIZENSHIP TRAINING.

The great need for training in citizenship is very evident. The process of civic training is fundamentally the same in all communities; but an essential principle in that process is that it must consist largely in deriving educational values from the actual civic situations in which the young citizen normally finds himself. If he has a background of rural experience, he needs civics instruction that takes its point of departure in that experience and refers back to it. For this reason much time has been given during the past year to a study of the adaptation of civics instruction to the requirements of schools in rural communities.

For city schools a series of graded "Lessons in civics for the six elementary grades" was prepared. They are unique in their direct and complete organization around activities and experiences arising from situations typical of the years in the children's lives for which they are designed. They are based consistently on the principle that "any material which has a legitimate place in the course holds that place because it is related to some 'civic situation' in which the child is normally to be found and his reaction to which is capable of being modified by a 'civics lesson.'" These lessons were planned in recognition of the necessity of beginning the civic training of the young citizen with the first year of school life and making it continuous. They afford the best preparation *for* citizenship because they provide persistent training *in* citizenship through these early formative years. They constitute a distinct contribution to the available means of "Americanizing" both foreign born and native born, and it is hoped will extend their influence beyond the children in the school to the parents in the home.

These "Lessons in civics for the six elementary grades" are being issued in Bulletin, 1920, No. 18, and are available for use in the schools in quantities at cost price. Their completion and distribution in time for use in the schools in the fall of 1920 was made possible by the cooperation of the Junior Red Cross. The Junior Red Cross also printed for the bureau the "Lessons for the three primary grades" in Teachers' Leaflet No. 9, in order that they might be available during the summer.

SCHOOL-DIRECTED HOME GARDENING.

For a number of years the bureau has endeavored to promote home gardening, directed by the school, in all cities, towns, and industrial villages. In the war period the work was expanded to a "United States School Garden Army" and financed to the extent of $250,000 from the fund for national security and defense. This lapsed on

June 30, 1919. The working force was immediately reduced to conform to the appropriation of $25,000.

This reduced working force was confronted by the fact that the production of food was the most urgent need of the world. The work of the two previous years was of great assistance from the outset. The mailing list of 36,558 public-school and 3,805 parochial-school teachers who were actively interested and engaged in gardening was of great value. This list has been constantly revised, and at the end of this fiscal year totaled over 45,000 teachers.

Early in the year all the single-sheet mimeographed lessons that had been used during 1918–19 were revised and printed in manual form. The printed manuals reduced the cost of production and the labor of mailing and added to the attractiveness and usefulness of these lessons. These manuals are used in many schools as teachers' reference texts in connection with the teaching of classroom lessons and also by the teachers as guides when giving instruction in gardening.

Manuals of garden lessons adapted to the five climatic zones of the United States have been published. A short description of each publication is given below.

NORTHEASTERN STATES.

Three pamphlets have been printed for use by teachers in the Northeastern States in the work of the School Garden Army. The first of these is a manual of vegetables, with more than a hundred lessons upon various phases of planning gardens and growing crops. It is divided into 10 sections, as follows: Planning the garden; soils; enriching the soil; the seed; planting the crop; growing the crop; garden crops; garden pests; gathering and disposing of the crop; fall gardening.

The second is a manual treating of flowers in a similar way, illustrated by many photographs of flowers as adapted to school use. It includes the results of many years' experience in growing bulbs, foliage, and flowering plants in connection with school-supervised gardening.

The third pamphlet is devoted to courses in school-supervised gardening, and includes outlines for the first six grades, with definite suggestions upon various phases of nature study and gardening for each grade. The most important of these courses is entitled "A course in gardening based on nature study for the first six grades of the elementary schools," and this course is arranged by seasons and subjects in such a way that it can be followed by any teacher.

SOUTHEASTERN STATES.

"Lessons in School-Supervised Gardening for the Southeastern States" contains 80 practical garden lessons. It is divided into eight sections: Planning the garden; soil preparation; enriching the soil; seeds; planting and care of the crop; garden crops; enemies of the garden; harvesting and use of crops.

Mimeographed outlines for teachers were issued to cover the fall, winter, spring, and summer seasons. A list of vegetables to be planted in each climatical zone, by months and methods of planting each crop, was issued in tabular form.

"Home Gardening for City Children of the Fifth, Sixth, and Seventh Grades" is the result of three years' experience of the special field demonstrator in Virginia and the Carolinas. This manual is prepared on the project basis and is used as a textbook in many southeastern cities.

SOUTHWESTERN STATES.

The "Garden Manual for the Southwestern Region" contains 84 lessons adapted to the climatic conditions and constituting a year's work in gardening. Teachers' outlines for the four garden seasons were issued at the beginning of each quarter to accompany this manual. Separate outlines were prepared for grades four, five, six, and seven. The suggestions for each school term were designed to be timely and practical.

Forty lessons in gardening are included in "Lessons in Gardening for the Southwestern Region." This publication is adapted for the use of teachers who wish to conduct the work during the second school semester and summer vacation. It is also adapted to use in schools giving one lesson per week throughout the year.

Manuals on fruits and flowers are now in preparation.

CENTRAL STATES.

"Lessons in gardening for the Central States region" have been brought together in Garden Manuals Nos. 1 and 2. Manual No. 1 deals with "Getting the garden ready and planting and caring for the crops." Manual No. 2 is divided into "Planting and caring for crops" (vegetables not covered in No. 1), "Preventing and controlling pests and plant diseases," and "Getting ready for next year's crop." These two manuals constitute a year's course in vegetable gardening.

A teacher's outline was issued at the beginning of each quarter to accompany the manuals.

WESTERN STATES.

The manual of school-supervised gardening for the Western States is divided into two parts: Part 1 contains 48 practical garden lessons dealing with the problems peculiar to the Western States; part 2, "Suggestions to teachers," contains outline courses of study, suggestions for organization, and plans for keeping up interest in garden work with children.

The information contained in the manuals of garden lessons is not new from a horticultural standpoint. Experiences of four years in promoting gardening, however, had demonstrated conclusively that the public-school teachers could make very little use of the average garden bulletin without reorganizing the material completely. The information, word and sentence formation, in these manuals was therefore simplified to conform to the ages and school grades of children they were intended to reach. For the convenience of the teachers all manuals were divided into lessons adapted to the seasons of the year and the varying climatic conditions of the regions.

Four sets of lantern slides which were added to the equipment of this division were used in visual instruction. Lectures on gardening were written to accompany these slides. Sets of slides were loaned to garden supervisors and teachers, and, together with the moving-picture films purchased in 1919, were in constant use. Through the medium of slides and films the garden message was conveyed to thousands of adults and children. This part of the work could be expanded with profit. Sets of slides and films showing actual garden practices for a year under differing climatic conditions would be invaluable supplements to classroom and field instruction.

Two monthly series of broadsides were sent to the press mailing list. One series comprised a number of stories based on the myths and legends of literature into which was ingeniously woven practical garden information; and the other series contained practical garden lessons of the month which was distributed during the growing season.

FIELD SERVICE.

Under the plan of reorganization the regional director for the Southeastern States was promoted to the directorship. The States under his supervision were placed under the direction of the regional director for the Southwestern States. The territory in this reorganized region was so large and the distances between cities so great that the States of Colorado and New Mexico were transferred to the Western States region and Kentucky to the Central States. The regional directors for the Western and Southwestern States were

continued on full-time and the services of the Central and Northeastern States directors were retained on a part-time basis. The 29 assistant regional directors were discontinued because of lack of funds.

The granting of a deficiency appropriation, in November, made it possible to enlarge the field force. The real success of promotion of a new educational project depends largely on personal work of field representatives. Rigid economy was, therefore, practiced in the central office in order that the field force might be increased. Assistant regional directors were appointed in the Central and Northeastern States, the regions having the largest city population. An assistant regional director was also appointed for the southwestern region, but as he resigned after one month's service the position was not continued. Part-time assistant directors, who limited their work to single States or sections of several States having large city population, were appointed as follows: One in the Northeastern States, two in the Central States, two in the Western States, and three in the Southern-Southwestern States. Sixty-three collaborators assisted in promoting gardening either in large cities or geographical regions.

The directors and assistant directors attended State teachers' associations, teachers' institutes, and public meetings where the maximum number of teachers could be reached by minimum travel. The reduction in the number of directors of the previous year made it impossible to give the same personal assistance in organizing the work as was given last year. The results of the previous year were constantly referred to, and by holding conferences in important centers and by much correspondence a high quality of service was rendered by the field agents.

MANUSCRIPTS COMPLETED.

A leaflet by the Commissioner of Education, outlining the educational and economic value of school directed home gardening, has been reprinted and widely distributed. A printed folder, which could be used as a poster on school bulletin boards, and mimeographed leaflets outlining the plan of the Garden Army in 1920, were issued. Each regional director prepared an outline course of study adapted to the four seasons in his region. The course of study for the Northeastern States was published and the others went to teachers in mimeographed form. The manuals of garden lessons and courses of study form comprehensive and fairly complete junior project publications.

PLANS AND POLICIES OF THE YEAR.

The main effort of the year has been to make gardening a more permanent part of the school curriculum and to increase the educa-

tional value of the subject. It was clearly seen that the motto of the Garden Army "A garden for every child, every child a gardener," could only be realized when gardening became a definite part of school work. This aim on the part of the Garden Army officials to work for permanency and greater educational efficiency conformed to the desires of school officials. It is estimated that more than 2,000,000 children did leisure garden work under the direction of individuals and produced last year more than $40,000,000 of food.

VISUAL INSTRUCTION.

During the war the National Government made and used for various purposes great numbers of moving pictures. With the inception of peace the films of these were largely useless for governmental activities. It was believed that they might serve an excellent purpose, both in direct instructional value and in promoting the more general use of the moving picture as a school aid, if they were distributed to schools throughout the United States.

The Bureau of Education received 2,160,000 feet of film during the fiscal year ending June 30, 1920, and deposited 982,000 feet with its State distributing centers. It now has a total of 8,275,000 feet of film, 4,927,000 feet of which are in circulation, and the remaining 3,348,000 feet are held in the vault to be repaired, assembled, and inspected. The film material was received through the very courteous cooperation of the departments of the Government, of allied organizations, and industrial companies, as shown by the lists which follow.

The distribution of films has been carried on through the extensive cooperation of the extension departments of the State universities, which act as distributing centers for their respective States, and are held responsible for the proper circulation of films in their own territory. It is to be understood, then, that the bureau does not send out films direct to users, but releases and deposits such films with its State distributing centers, where universities, normal, high, and elementary schools, churches, Young Men's Christian Associations, community centers, etc., may obtain the use of them for educational and recreational exhibitional purposes. There are now a total of 42 distributing centers, 11 of which were established during the past fiscal year. The work is, therefore, principally the salvaging of educational and war films and systematically distributing them throughout the country for use through educational and other public organizations.

The war films in circulation cover a fairly complete review of the war, and include the following topics: Communications and camouflage in modern warfare, work of the American engineer, the transportation of men and supplies, lumbering and shipbuilding, construc-

tion of airplanes, the Air Service, sports and entertainment for soldiers, American Expeditionary Forces activities and actual battle scenes, care of the wounded, modern ordnance, chemical warfare, submarines, generals and officials of the war, feeding the Army, training of the soldier, and keeping the Army well. Among the educational films the following topics are the most important: Health, oral hygiene, surgery, rehabilitation of the crippled soldier, industry, road building, agriculture, farming, Coast Guard defense, and travel.

A system has been outlined whereby State distributing centers are required to submit monthly reports stating where the films were shown, date, and attendance. The system has worked very successfully. It appears from the reports submitted during the past seven months, the period during which this system has been in operation, that the 4,927,000 feet of film in circulation were exhibited to 8,600,000 persons. The records indicate that the average attendance at each exhibition was 300. A local distributing service is also carried on from this office for the benefit of educational institutions, Government bureaus, and civic organizations in the District of Columbia. Approximately 720,000 feet of film was circulated in the District, with an average attendance of 350 per exhibition.

The 30,000 lantern slides collected were deposited with distributing centers, where they may be procured for educational purposes. Distributing centers also receive slides and films from other sources. The following motion-picture subjects were assembled and edited and prints reproduced from the negative for circulation: "Camouflage in Modern Warfare," "Communications on the Battle Field," and "Making the Desert Blossom." Three thousand feet of leader film, entitled "U. S. Government Film—Distributed by the Visual Instruction Section—U. S. Bureau of Education—Department of the Interior," was printed and placed on the films which are being circulated.

Approximately 50,000 feet of negative on medical subjects was loaned by the Surgeon General's Office, War Department. The negative was cut and assembled and arranged in proper condition to reproduce positive prints. Plans were arranged so that educational institutions could secure copies at cost of production.

The following two motion-picture bulletins were published: Educational Institutions Equipped with Projection Machines; Motion Pictures and Motion Picture Equipment.

The titles of a great many of the film subjects were copied and mimeographed and copies mailed to distributing centers. Many valuable lists were made available to the public, showing where educational films on specific subjects could be secured. Other valuable data on motion-picture activities were compiled. A great deal of time was consumed in examining and exhibiting educational films

sent by various organizations for synopsis and approval of their educational value.

EDUCATION IN THE HOME.

Along this line the purposes have been to bring education into the homes of those who have had limited opportunities; to help parents in the care and training of their little children before they are of school age; and to promote a closer cooperation of home and school so that parents and teachers may work together intelligently for the best interests of their children. In furthering these purposes 22 reading courses have been prepared, of which 17 have been issued in leaflet form and distributed. Sixteen of the courses were "After-war courses" and about 150,000 of these have been distributed in the camps and cantonments. About 13,000 readers reading for formal recognition have been enrolled in the various courses in all States, the largest enrollments being in New York, Pennsylvania, Ohio, California, Illinois, and Massachusetts.

A plan of cooperation between the State departments of education, extension departments of State universities and the bureau in connection with the home-reading courses was arranged. This plan has been presented in Virginia, Pennsylvania, Massachusetts, Rhode Island, Connecticut, Wisconsin, Indiana, Kentucky, South Carolina, North Dakota, South Dakota, Arizona, and Iowa. In nine of these States it has been accepted and put into operation and special collaborators appointed to carry out the work. These States are Indiana, Kentucky, North Dakota, South Dakota, Virginia, South Carolina, Arizona, Iowa, and Wisconsin.

Through the courtesy of the American Library Association, which has cooperated in the preparation of new reading courses, the following courses are ready for printing: Heroes of American Democracy, The Call of Blue Waters, Iron and Steel, Shipbuilding, Machine-Shop Work.

These vocational courses are issued as a series of "After-war courses" and are offered to meet the demand for such courses from men who have not had technical training, but who wish to read books of technical value in their field of labor; 96,343 reading courses, 1,821 bulletins, and 5,000 posters have been sent out. Through women cooperators in North Carolina 44,058 "After-war courses" have been distributed to returned soldiers in that State.

COMMUNITY ORGANIZATION.

The public-school plant may be as effective a headquarters of adult-citizen expression as it is a center of child instruction. It affords for the people a ready medium of service contact by which the community may deal with such problems as public health and

sanitation, improvement of agricultural and industrial methods, promotion of thrift, and processes of Americanization.

For 1919–20 the bureau has aided the growth of the sentiment for the use of the school as a community center by giving special help to the actual community development, which is going forward within and out from the District of Columbia, and by the presentation of the community-center program in addresses and conferences in various parts of the country.

Community-center development in the District of Columbia has been legally recognized and supported by congressional appropriation for three years. It is hoped that the work in the District will serve as an example and radiation base for its spread throughout the Nation. Assistance has been given to the 17 sections thus far organized in the District by holding a series of weekly meetings with the community secretaries, by coordinating the civic, recreational, and economic use of the school plant by adults and older youth, and by inaugurating a plan of cooperation between the public school and the Postal Service.

In presenting community-center programs to the country at large 104 single lectures were delivered to State conventions, teachers' institutes, chambers of commerce, and similar organizations. Special courses of six lectures on community work were delivered at Rock Hill, S. C.; Peabody College, Tennessee; Glens Falls, N. Y.; University of North Carolina; Charleroi, Pa.; Pittsburgh, Pa.; University of Virginia; Berea College, Kentucky; University of Kentucky; and Bloomsburg, Pa.

A plan was developed for cities and counties and put in operation in one State by which the municipal and volunteer agencies of public welfare can coordinate their activities and prevent waste of money and good will.

The far-reaching results of this work of the bureau is shown by the fact that the principle of community organization with the schoolhouse as the center is now generally accepted, and both in city and in county new schoolhouses are planned for the use of the adult population of the country as well as for the use of the children. Probably no single educational movement has such great possibilities for good.

CHILD HEALTH.

The bureau has furthered better health teaching in the public schools and better observance on the part of the children of the common rules of healthful living. The outline of the program is briefly as follows:

1. A pair of scales in every school and every child weighed and measured monthly. (Weight for height and age is accepted as an index of nutrition and progress in growth.)

2. Time definitely laid aside for the teaching of health.
3. Health report sent home on monthly report card.
4. School lunch available for every child.
5. Correction of physical defects with special care for malnourished children.

A series of health-education pamphlets have been prepared and printed. It consists of the classroom weight record and seven pamphlets. Four of these, "Wanted, Teachers for Child Health Service," "Diet for the School Child," "Summer Health and Play School," and "Teaching Health" were published before July, 1919. These pamphlets have filled a widespread demand and have had a very large sale through the Superintendent of Documents. Three new pamphlets in the series have been issued during the year—"Child Health Program for Parent-Teacher Associations and Women's Clubs," "Further Steps in Health Teaching," and "The Lunch Hour at School." The height and weight tables compiled have been printed in large poster form to meet a demand from clinics, schoolrooms, etc.

The health education of the bureau has been carried on largely through correspondence and distribution of literature. The demand for assistance has been enormous and varied, as shown by the many letters (over 6,000) received during the year. Personal attention has been given to all letters and approximately 500,000 pieces of material have been sent upon request. Assistance has been given not only to teachers, but to requests and inquiries which have poured in from Red Cross workers, home demonstration agents, public health nurses, tuberculosis associations, women's clubs, departments of health, hospitals, libraries, etc. Public health agencies and associations have realized the importance of universal health education, and have shown great interest and cooperation in the furtherance of our program. Sometimes a school has become interested through a school nurse, or a home demonstration agent, or a Red Cross worker. Often an individual teacher has started weighing and measuring in her classroom, and from her room it has spread into the whole school system. Sometimes the home economics department introduces the plan. Sometimes it is brought in in connection with a milk campaign or a poster contest in the art department. The child health organization of New York has done much for the promotion of this program in bringing it to the attention of teachers and school officers and otherwise.

V. RESEARCH WORK TO DETERMINE STANDARDS IN EDUCATION.

The fifth activity of the bureau, and one to which it has been able to give the least attention because no appropriation has been made for it, is "to determine standards of measurement in education and

to conduct and direct experiments in education, to the end that we may finally have a larger body of definite scientific knowledge about education and educational processes and methods." In September, 1919, the commissioner arranged a plan for the establishment of research stations to utilize in a national way such special resources and facilities as might be placed at the disposal of the bureau by cooperating institutions. The plan contemplates a cooperative arrangement in each case between the bureau and an educational institution.

The essential features of the plan are:

1. Selection by the Commissioner of Education of a number of educational institutions to be invited to participate.

2. Acceptance by president and board of trustees of the terms and conditions outlined.

3. Recommendation by the president of the institution of one or more representatives to serve as special collaborators of the Bureau of Education, at the nominal salary of $1 per year each.

4. Appointment of special collaborators, by the Secretary of the Interior, upon recommendation of the Commissioner of Education. Of the special collaborators forming the staff of each research station, one will be informally designated "director" by the Commissioner of Education.

5. Acceptance by appointees of appointments as special collaborators, who will then take the oath of office and file papers furnished by the Commissioner of Education.

6. Approval of definite projects and procedure by the Commissioner of Education, after correspondence with the director of each research station.

7. Consideration by the Commissioner of Education of reports made by the several research stations, and publication of those found to be available.

8. Due credit will be given to stations and individuals for direction of projects and authorship of reports.

A large number of topics were suggested as typical of studies and investigations that seemed to be worthy of attention. Stations were established at the universities of California, Illinois, Iowa, Kansas, Michigan, Minnesota, Mississippi, Missouri, North Carolina, Texas, Utah, Wisconsin, Virginia, Washington, Cornell University, and the Oregon Agricultural College. Among the questions being studied are: Common knowledge of health matters; the drama in colleges and universities; student loan funds; democratic elements now existing in American education; student self-government; educational tests; the use of the motion picture in the schools; and the education of girls and women. The work of these stations was organized and given direction in two conferences of the directors held at St. Louis and at Cleveland, Ohio.

VI. ADMINISTRATIVE DUTIES.

LAND-GRANT COLLEGES.

Congress has authorized the Bureau of Education to perform certain duties in connection with the administration of the income resulting from the principal obtained by the sale of lands granted under the first Morrill Act, an amount approximating $1,009,225, and of the Morrill-Nelson fund, which amounts to $2,500,000 annually, $50,000 a year going to each State. The bureau is required to see that the interest from the first fund is at least 5 per cent and that it is expended according to the requirements of the first Morrill Act. It must also audit the expenditure of the $50,000 granted annually to each State for the college or colleges of agricultural and mechanic arts. Very definite limitations are set on the expenditure of these moneys and the bank interest on them must be used for the original purposes of the act.

The bureau must also prepare annually reports based upon information received from these institutions regarding the financial administration of the land-grant colleges. The report for 1917–18 shows that 125,673 young men and women were being educated in them. For the year 1919–20 there will probably be an increase of 25 per cent over that number. Each institution having met the requirements, the Commissioner of Education then certifies to the Secretary of the Interior that the money has been spent according to law. He also certifies to the President of the Senate and the Speaker of the House of Representatives authorizing Congress to continue the annual appropriations according to the Morrill-Nelson Acts.

ALASKA.

The greater part of the administrative duties of the bureau are those connected with the education, medical relief, and support of the natives of Alaska.

During the year the field force of the Bureau of Education in Alaska consisted of 6 superintendents, 133 teachers, 9 physicians, and 13 nurses. Sixty-seven schools were maintained.

As the result of the epidemics of influenza among the natives of northern and western Alaska during the autumn of 1918 and the spring of 1919 about 250 children were left orphans. In the Nome region it was found possible to distribute the orphans among Eskimo families, but in the Bristol Bay and Cook Inlet districts it was necessary for the bureau to assume their entire care in orphanages which were erected at Kanakanak and Tyonek.

The appropriation of $80,000 for medical relief was expended in maintaining hospitals at Juneau, Kanakanak, Akiak, Nulato, and Kotzebue; 9 physicians and 13 nurses were employed. To assist them

in providing medical relief, each teacher is provided with a standard medical equipment with which to attend to ordinary ailments and less serious injuries.

The rehabilitation of the colony at Metlakatla, on Annette Island, is progressing satisfactorily. In 1917 the Secretary of the Interior, on behalf of the Metlakatlans, entered into a five-year lease with the Annette Island Packing Co., of Seattle, granting fish-trap privileges within the reserved waters adjacent to Annette Island and permission to erect and operate a cannery within the reserve. The returns to the Metlakatlans for fish royalties, trap fees, labor, and for lumber purchased from the local sawmill amounted during the season of 1919 to $90,032.88. It is hoped that in 1921 the revenues accruing from the lease will enable the Secretary of the Interior to take over for the Metlakatlans the property of the lessee within the reserve and to arrange for the operation of the cannery by the natives themselves. The Metlakatla Commercial Co., organized by the Bureau of Education, continues successfully to conduct the mercantile business of the colony and to operate the sawmill. The importation into Alaska of laborers needed by the salmon canneries has been a troublesome problem to the operators of the canneries and a great detriment to the natives of the villages in which the canneries are located. The Metlakatla Commercial Co. successfully fulfilled its contract with the Annette Island Packing Co. for the furnishing locally of the labor required by the cannery in Metlakatla, thus solving the problem in so far as their village is concerned.

Assuming that there has been the usual net increase of 20 per cent in the number of reindeer during the year, there should be, approximately, 180,000 reindeer in Alaska June 30, 1920. The magnitude and value of the industry have resulted in the making by Congress of an appropriation to enable the Bureau of Biological Survey, Department of Agriculture, in cooperation with the Bureau of Education, to make investigations, experiments, and demonstrations for the improvement of the reindeer industry in Alaska; the Chief of the Biological Survey has proceeded to Alaska in order to organize this work. The distribution of reindeer among the natives and the use of the enterprise as the form of industrial education best adapted to the races inhabiting the untimbered regions of Alaska will remain under the supervision of the Bureau of Education.

Regulations were adopted making effective the authority granted by Congress for the sale of surplus male reindeer belonging to the Government and the use of the proceeds of such sales in the extension of the industry. The first sale under these regulations was made at Mountain Village, on the Yukon River, during the autumn of 1919. Under judicious management the proceeds of such sales

might provide the funds necessary for the support and extension of the reindeer industry independently of appropriations made by Congress. It is very desirable that the reindeer industry be extended into the region tributary to the Government railway in Alaska. The area suitable for pasturage of reindeer in the Broad Pass region, reached by the railway and extending eastward along the northern and southern slopes of the Alaska range is, approximately, 12,000 square miles. Most of this region is timberless and more than 2,000 feet above sea level; it is, therefore, swept by mountain breezes, which would serve to protect herds against mosquitoes and flies. After the Government has demonstrated the practicability of raising reindeer in that part of Alaska, private owners would undoubtedly drive their herds into that region in order to avail themselves of the market afforded by railway transportation.

The 67 villages in Alaska in which the work of the Bureau of Education is carried on are scattered along thousands of miles of coast line and on the great rivers. Very many villages are not on the routes of commercial vessels. Some of the settlements can be brought into touch with the outside world only during the short season of open navigation in midsummer. The securing of transportation from Seattle to their remote destinations of teachers, physicians, and nurses, and of the supplies and building materials required in the Alaska school service, the Alaska medical service, and the Alaska reindeer service is an undertaking of great difficulty. The problem was acute during the summer of 1919, transportation to and in Alaska being in a chaotic condition as the result of war conditions and because vessels carrying freight for western and northern Alaska had left Seattle before the passage of the appropriations for the support of the work of the Bureau of Education in Alaska. Even on the established routes rates were excessive and steamers were unable to maintain their time schedules; there were long delays of passengers and freight at transfer points; in several instances excessive emergency transportation of employees and supplies had to be secured. For a long series of years the Coast Guard Service, through its vessels cruising in Alaskan waters, has willingly cooperated with the Bureau of Education, but its vessels are not adapted to the carrying of passengers and freight, and they have numerous other duties to perform.

Experience has shown that the work of the Bureau of Education in Alaska can never be administered effectively and economically until the bureau owns and controls its own vessel. Request was therefore made to the Navy Department for a vessel suitable for use by the Bureau of Education in connection with its work in Alaska. Complying with the request, the Navy Department transferred to the Department of the Interior the U. S. S. *Boxer*, a staunch wooden

vessel with a carrying capacity of about 450 tons and admirably adapted for the purpose contemplated. The endeavor to secure a congressional appropriation to meet the expense of refitting the *Boxer* for service in Alaskan waters did not meet with success. The vessel is held at the Naval Training Station, Newport, R. I., pending the securing of an appropriation.

The vast extent of the Territory, the remoteness of many of the settlements, and lack of transportation facilities make the taking of the census of Alaska a matter of great difficulty. At the request of the Bureau of the Census, Mr. W. T. Lopp, superintendent of education of natives of Alaska, was placed in charge of the entire work of the Alaska census of 1920, with the bureau's superintendents, physicians, and teachers in all parts of the Territory as special agents and enumerators. This cooperative arrangement, while greatly increasing the duties of the bureau's employees during the year, proved to be mutually economical and advantageous.

ORGANIZATION OF THE BUREAU.

The bureau is organized under the following divisions: Office of chief clerk, editorial, statistical, library, city school systems, higher education, rural education, foreign educational systems, industrial education, home economics, home education, school hygiene, civic education, school-directed home gardening, community organizations, Americanization information service, visual instruction, school-board service, Alaska, and stenographic. Because of decreased appropriations the work in school-directed home gardening, Americanization, and school-board service was greatly curtailed. A specialist in industrial and economic relations in education was added to the city school division. Specialists from the bureau have worked with the Committee on Reclassification of Salaries, the Interdepartmental Social Hygiene Board, and the Red Cross. The lines of work carried on by the several divisions have been given in the general statement.

LIST OF PUBLICATIONS.

A list by title of the publications of the bureau for the year is here given:

BULLETINS, 1919.

2. Standardization of Medical Inspection.
6. A Half Time Mill School.
8. Life of Henry Barnard.
15. The Adjustment of the Teaching Load in a University.
20. The Rural Teacher of Nebraska.
22. A Survey of Higher Education, 1916–1918.
28. Educational Periodicals during the 19th Century.
29. Schools of Scandinavia, Finland, and Holland.
31. Summer Schools in 1918.

35. The Junior College.
36. Education in Italy.
37. Educational Changes in Russia.
38. Education in Switzerland, 1916–1918.
39. Training Little Children.
40. Work of the Bureau of Education for the Natives of Alaska, 1917–18.
41. Educational Study of Alabama. Reprint of Chapter 2.
43. Education in France in 1916–1918.
44. Modern Education in China.
45. Accredited Secondary Schools of the North Central Association.
46. Bibliography of Home Economics.
48. Educational Hygiene.
49. Education in Parts of the British Empire.
50. The Public School System of Memphis, Tenn.
    - Part 1. An Industrial and Social Study of Memphis; School Organization, Supervision, and Finance; The Building Problem.
    - Part 2. The Elementary School; The High Schools.
    - Part 3. Civic Education.
    - Part 4. Science.
    - Part 5. Music.
    - Part 6. Industrial Arts, Home Economics, and Gardening.
    - Part 7. Health Work.
51. The Application of Commercial Advertising to University Extension.
52. Industrial Schools for Delinquents, 1917–18.
53. Educational Work of the Young Men's Christian Association, 1916–1918.
54. The Schools of Austria-Hungary.
55. Business Education in Secondary Schools.
56. The Administration of Correspondence Study Departments of Universities and Colleges.
57. Educational Conditions in Japan.
58. Commercial Engineering.
59. Some Phases of Progress in Latin America.
60. Monthly Record of Current Publications, September, 1919.
61. Public Discussion and Information Service of University Extension.
62. Class Extension Work in the Universities and Colleges.
64. Library Activities, 1916–1918.
66. Training Teachers of Agriculture.
67. Monthly Record of Current Educational Publications, October, 1919.
68. Financial and Building Needs of the Schools of Lexington, Ky.
69. Proceedings of the Fourth Annual Meeting of the National Council of Primary Education. (Held at Chicago, Ill., Feb. 25, 1919.)
70. Schools and Classes for Feeble-Minded and Subnormal Children.
71. Educational Directory.
    - Part 1. Government Educational Activities.
    - Part 2. Public School Systems.
    - Part 3. Higher Education.
    - Part 4. Special Schools.
    - Part 5. Summer School Directors.
    - Part 6. Libraries and Museums.
    - Part 7. Miscellaneous Educational Organizations.
72. An Abstract of the Report of the Public School System of Memphis, Tenn.
74. The Federal Executive Departments as Sources of Information for Libraries. (Also Reprint.)

75. Monthly Record of Current Educational Publications, November, 1919.
76. Community Americanization.
77. State Americanization.
78. Schools and Classes for the Blind, 1917–18.
79. Schools for the Deaf, 1917–18.
80. Teaching English to Foreign-Born.
82. Motion Pictures and Motion-Picture Equipment.
83. Monthly Record of Current Educational Publications, December, 1919.

BULLETINS, 1920.

1. The Problem of Mathematics in Secondary Schools.
2. Monthly Record of Current Educational Publications, January, 1920.
3. Private High Schools and Academies.
4. The Problem of Adult Education in Passaic, N. J.
5. Monthly Record of Current Educational Publications, February, 1920.
6. Monthly Record of Current Educational Publications, March, 1920.
11. Statistics of State School Systems, 1917–18.
14. Monthly Record of Current Educational Publications, April, 1920.
15. Monthly Record of Current Educational Publications, May, 1920.
16. A Survey of Education in Hawaii. (Preliminary Edition.)

REPORTS.

Annual Statement of the Commissioner, 1919.
Annual Report of the Commissioner, 1918–19.

LIBRARY LEAFLETS—LIST OF REFERENCES.

No. 3. List of References on Play and Playgrounds. (Reprint.)
No. 5. List of References on the Junior High School. (Reprint.)
No. 6. List of References on Stories for Young Children. (Also Reprint.)
No. 7. List of References on Vocational Education.
No. 8. List of References on Teachers' Salaries.
No. 9. List of References on the Project Method in Education.
No. 10. List of References on Education for Citizenship.
No. 11. List of References on Consolidation of Schools.

HEALTH EDUCATION SERIES.

No. 1. Wanted Teachers to Enlist for Child Health Service. (Reprint.)
No. 2. Diet for the School Child. (Reprint.)
No. 5. Child Health Program.
No. 6. Further Steps in Teaching Health.
Poster—Right Height for Boys. (Also Reprint.)
Poster—Right Height for Girls. (Also Reprint.)
Classroom Weight Record. (Reprint.)
Folding Poster—Right Height and Weight. (Reprint.)

KINDERGARTEN CIRCULARS.

No. 4. Manufacturers Endorse the Kindergarten.
No. 5. The Kindergarten as an Americanizer.
No. 6. The Child and the Kindergarten.
Kindergarten Extension Series No. 1.
Answers to Objections to the Kindergarten. (Reprint.)
Broadside—The Kindergarten Division.

SECONDARY SCHOOL CIRCULARS.

No. 5. The Reorganization of the First Courses in Secondary School Mathematics.

HIGHER EDUCATION CIRCULARS.

No. 15. Increases in Salaries of College Teachers.
No. 16. The Rhodes Scholarships.
No. 17. How Much Does Education Cost?
No. 18. The Ohio Plan for the Training of Teachers and the Improvement of Teachers in Service.
No. 19. The Rhodes Scholarships, 1920.

INDUSTRIAL EDUCATION CIRCULARS.

No. 3. Industrial Art as a National Asset. (Reprint.)
No. 4. The Army Trade Tests. (Reprint.)

HOME ECONOMICS CIRCULARS.

No. 2. Current Problems in Home Economics. (Reprint.)
No. 4. Principles and Policies in Home Economics Education. (Reprint.)
No. 5. Government Publications for Home Economics Teachers and Students. (Reprint.)

READING COURSES.

No. 6. Thirty Books of Great Fiction. (Reprint.)
Thirty Books of Great Fiction. (Section A—Reprint.)
Thirty Books of Great Fiction. (Section B—Reprint.)
No. 7. Thirty World Heroes. (Section B—Reprint.)
Thirty World Heroes. (Section C—Reprint.)
No. 10. American History. (Section A—Reprint.)
American History. (Section B—Reprint.)
No. 11. France and Her History. (Also Reprint.)
Broadside—Greatest Books of All Ages.
Posters—Your Public Library is Free—Use It.

COMMUNITY CENTER CIRCULARS.

No. 3. The Forum.

SCHOOL LIFE.

Volume 3: Nos. 1–12.
Volume 4: Nos. 1–12.
Volume 4: Nos. 9–10, May 1–15, 1920, Reprint pages 14–15.
Index and title-page, volume 2, January–June.
Index and title-page, volume 3, July–December.

AMERICANIZATION.

Americanization, August 1, 1919.
Americanization, No. 13, September 1, 1919.
Americanization, vol. 2, No. 2, October 1, 1919.
Americanization, November 1, 1919.

UNITED STATES SCHOOL GARDEN ARMY SERIES.

A Manual of School-Supervised Gardening for the Northeastern States. Part I. Vegetables. (Also Reprint.)

A Manual of School-Supervised Gardening for the Northeastern States. Part II. Flowers. (Also Reprint.)
Courses in School-Supervised Gardening for the Northeastern States. (Also Reprint.)
Lessons in School Supervised Gardening for the Southeastern States.
Home Gardening for City Children of the Fifth, Sixth, and Seventh Grades. (Also Reprint.)
A Manual of School Supervised Gardening for the Western States.
School Garden Army Leaflet No. 1, Home Gardening for Town Children.
Northeastern States Leaflet No. 96, School Supervised Gardening in a City School System.
Broadside—The Garden Lady's Stories No. 2.
Broadside—The Garden Lady's Stories No. 3.
Broadside—The School Garden Army in 1920. (Also Reprint.)
Broadside—Lessons in Gardening and Floriculture.
Broadside—Little Girl—Big Boy.
Broadside—Be Sure You're Right, Then Hoe Ahead.
Broadside—Dame Ladybird and Her Friends.
School Garden Army Certificates.
Individual Garden Report Forms.

EXTENSION LEAFLETS.

No. 1. Educational Institutions equipped with Motion Picture Projection Machines.

MISCELLANEOUS PUBLICATIONS.

Available Publications of U. S. Bureau of Education, August, 1919.
Available Publications of U. S. Bureau of Education, December, 1919.
Available Publications of U. S. Bureau of Education, April, 1920.
Flag Exercises for the Schools of the Nation. (Reprint.)
Bulletin—Education for the Establishment of Democracy, P. P. Claxton.
Broadside—Why Children Cannot Develop, etc.

UNFINISHED PRINTING.

The following were in the hands of the printer at the close of the year:

BULLETINS.

Natural Science Teaching in Great Britain.
Private Commercial and Business Schools, 1917–18.
Nurse Training Schools, 1918.
Normal Schools, 1917–18.
The Eyesight of School Children.
The University Extension Movement.
Development of Agricultural Instruction in Secondary Schools.
Administration and Supervision of Village Schools.
Biennial Survey of Education, 1916–1918. (Vols. 1–2.)
The Feasibility of Consolidating the Schools of Mount Joy Township, Adams County, Pa.
Agricultural and Mechanical Colleges.
Requirements for the Bachelor's Degree.
Correspondence Study in Universities and Colleges.
Monthly Record of Current Educational Publications, June, 1920.

TEACHERS' LEAFLETS.

No. 7. Recreation and Rural Health.

HEALTH EDUCATION SERIES.

No. 7. The Lunch Hour at School.
Health Education Publications. (Price List.)

READING COURSES.

No. 13. The Call of Blue Waters.
No. 14. Iron and Steel.
No. 15. Shipbuilding.
No. 16. Machine-Shop Work.

EXTENSION LEAFLETS.

No. 2. Motion Picture Films of Educational Value in the Possession of Associations and Commercial and Manufacturing Companies.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1921

WASHINGTON
GOVERNMENT PRINTING OFFICE
1921

THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.
Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 1, 1921.

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1921, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

I. GENERAL ACTIVITIES OF THE BUREAU.

ORGANIZATION AND FUNCTIONS.

The Bureau of Education is charged with certain administrative functions. These include the administration of a system of education for the natives of Alaska and duties connected with the administration of the income resulting from the principal obtained by the sale of lands granted under the first Morrill Act, an amount approximating $1,009,225, and of the Morrill-Nelson fund, which amounts to $2,500,000 annually, $50,000 a year going to each State. The bureau is required to see that the interest from the first fund is at least 5 per cent and that it is expended according to the requirements of the first Morrill Act. It must also audit the expenditure of the $50,000 granted annually to each State for the college or colleges of agriculture and mechanic arts.

The chief functions of the bureau, however, are nonadministrative.

The act creating the United States Bureau of Education defines its purposes and duties as those of collecting such statistics and facts as will show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country.

This statement of the functions of the bureau makes it primarily an institution for scientific research and gives it no administrative duties. Such administrative duties as it has have been subsequently assigned to it. Broadly stated, then, the functions of the bureau are as follows:

(1) To be informed on all subjects pertaining to education.
(2) To disseminate such information.
(3) To promote the cause of education generally.

I find that the bureau in attempting to discharge these functions has been undertaking a considerable variety of activities, which may be divided roughly into two main types, with subdivisions as follows:

(1) *Continuing or stated activities.*—(*a*) Business administration of the office; (*b*) administration of the educational system, medical relief, and reindeer herds for the natives of Alaska; (*c*) administration of certain provisions of law relating to the State colleges of agriculture and the mechanic arts; (*d*) collecting and compiling statistics; (*e*) library service; (*f*) publication and distribution of documents; (*g*) stenographic, clerical, and other incidental service.

(2) *Educational research and promotion.*—(*a*) Studies of various phases of education for the purpose of acquiring and digesting information; (*b*) preparation of manuscripts for publication as circulars of information, or bulletins, or portions of bulletins; (*c*) counseling with school officers, legislative committees, boards of school trustees, and others, and giving advice on educational matters; (*d*) official correspondence with seekers after information, advice, and other assistance; (*e*) representation at educational conventions for the purpose of keeping in touch with leaders and movements; (*f*) public addresses on educational topics; (*g*) organization and conduct of special conferences of educators and others; (*h*) organization and conduct of educational surveys and preparation of reports and recommendations based upon such studies.

PRESENT PERSONNEL OF THE BUREAU.

For carrying on the work of the bureau, exclusive of the work in Alaska, we have now in the offices at Washington 87 people. Of these approximately one-fourth are specialists engaged in the various lines of educational research and promotion, the remainder being made up of employees in the statistical division, librarians, stenographers, clerks, and others.

Under the administration of my predecessor the activities of these people were very largely directed by the commissioner personally. Dr. Claxton's experience before and during his 10 years in the commissionership gave him a knowledge of education and its technique which perhaps no other man in America could have. In attempting to assume the duties which he had been discharging I found it impossible to carry on the activities of the bureau as he had done. It became necessary for me to effect some kind of reorganization.

BASIS OF REORGANIZATION.

The form of organization is based on the analysis of activities indicated above. We have in the bureau these two general types of activities: First, the activities of a more or less routine character, which I have termed stated or continuing activities; and, second, the activities of highly trained experts in various fields of education, whom I have designated the technical staff.

CONTINUING OR STATED ACTIVITIES.

There are seven divisions of those activities which I have termed continuing or stated activities: Editorial, Library, Statistics, Alaska, Stenographic, Mails and Files, and Messenger Service. These have all been placed under the general direction of the chief clerk.

EDUCATIONAL RESEARCH AND PROMOTION.

The technical staff has been organized into four divisions under the direction of the assistant to the commissioner: Higher education, rural schools, city schools, and service division. The latter comprises certain individuals and smaller divisions, which have been consolidated into one, including physical education and school hygiene, industrial education, home economics, commercial education, educational legislation, and foreign education.

ACTIVITIES DISCONTINUED.

Owing to the lack of appropriations it has been necessary for the bureau to discontinue some of the important work previously carried on by it. Congress failed to provide an appropriation for the fiscal year 1921 for the work in school and home gardening which had been conducted by the bureau with considerable success since 1914. During the past year the work was gradually discontinued, the bureau having the part-time services of a special agent and of 40 special collaborators. At the close of the year 1921 this work was entirely discontinued.

The school board service division, which had for its object the establishment of a teachers' register so that it could assist school boards and heads of educational institutions in finding qualified teachers for vacancies, was discontinued on June 30, 1920.

Work in community organization which had been carried on since 1916 was discontinued in April, 1921. During the five years of his service, the specialist in community organization gave most of his time to the establishment of community centers in connection with public schools in the District of Columbia where the work is now well established.

For several years this bureau cooperated with the National Geographic Society in the distribution, weekly, to teachers and school officers throughout the United States of the Geographic News Bulletin, prepared and printed by the society, which also furnished the labor necessary to mail the publication. On account of various technical and legal questions which arose during the year in connection with that publication and in the interest of economy, it has been necessary to discontinue the cooperative arrangement with the National Geographic Society. The bulletin referred to will not, therefore, be issued this year from this bureau.

STATISTICS.

The Statistical Division completed the following statistical reports which had been begun during the preceding year: (1) Bulletin No. 31, 1920, Statistical Survey of Education; (2) Bulletin No. 24, 1920, Statistics of City School Systems; and (3) Bulletin No. 34, 1920, Statistics of Universities, Colleges, and Professional Schools.

Each of these bulletins contained statistics for the year 1917–18.

In the summer of 1920 this division prepared a large section of the Educational Directory, dealing with officials in State departments of education, in the offices of county and city superintendents, and in higher educational institutions, such as normal schools, professional schools, summer schools, colleges, and universities. It also revised to date the following mailing lists: Public high schools, private high

schools, commercial schools, city schools, normal schools, nurse-training schools, colleges and universities, and kindergartens.

A study has been made of the salaries and training of high-school teachers for 1918 and 1921, including a study of approximately 70,000 teachers of each date. The returns were put on punched cards, and it was necessary to punch about 75,000 cards to accommodate the returns. The cards were tabulated on the Powers's accounting machines in the Department of the Treasury, Income-Tax Unit. The 1918 returns were tabulated in December, 1920, and the 1921 returns in June, 1921. The report will be submitted shortly for publication.

The Statistical Division has been editing the various statistical reports for 1920. This work on the private commercial schools, nurse-training schools, and private high schools has been practically completed. Considerable work of this nature has also been done on the returns for colleges and universities, normal schools, city schools, and State school systems. About 34,000 cards for the report on public high schools have been punched. During the year one calculating machine has been added to the equipment.

The catalogue files for the following schools have been revised: Private high schools, nurse-training schools, industrial schools, normal schools, commercial schools, and universities and colleges.

CORRESPONDENCE.

During the year there were received at the bureau 139,920 letters, 41,664 library publications, and 66,639 statistical reports of various kinds. This does not take into account any of the mail matter received at the various research stations and by special agents and bureau offices outside of Washington.

During the year the following publications have been distributed under the direction of the Bureau of Education by the superintendent of documents:

Bulletins	422,022
Annual reports	14,324
Miscellaneous circulars	368,952
Total	805,298

In addition, an aggregate of 1,232,373 sheets of mimeograph material were distributed from the mailing room of the bureau, consisting of circulars of information, blanks for office records, questionnaires relating to investigations, bibliographies on educational subjects, articles on educational topics for publication in newspapers, announcements of conferences called by the commissioner, home reading courses, and form letters to be used in answering certain kinds of correspondence.

In addition to inquiries which could be answered by form letters, approximately 40,000 personal letters were prepared and mailed out from the bureau during the year.

LIBRARY.

The library continued during the year its usual bibliographic and reference service both to members of the bureau and to outside visitors and correspondents. The printed, mimeographed, and type-

written bibliographies prepared by the division were in great demand and were widely distributed. During the year 48 new bibliographies were compiled, and 206 of the earlier reference lists were thoroughly revised and brought up to date. Since funds were not available for printing additional numbers in the series of library leaflets, many of the new lists were issued in mimeographed form.

The Monthly Record of Current Educational Publications, prepared by the Library Division, was issued throughout the year. Owing to the early exhaustion of the printing fund, the publication of the record during the first half of 1921 was greatly delayed, and it was found necessary to combine the issues of four months into two double numbers for March–April and May–June, respectively.

At fairly regular intervals throughout the year the chief of the division contributed to School Life an annotated list of new books in education, covering nearly a page of the periodical in each case.

The library continues to cooperate in the production of printed catalogue cards for educational books with the Card Division of the Library of Congress, which distributes these cards with its regular stock for use in libraries all over the country. During the past year the cataloguing of current accessions to the library was kept up, and considerable progress was also made in cataloguing and classifying school textbooks which had been acquired at an earlier date. The total number of volumes catalogued and classified was 3,108; titles, 2,271.

The library acquired copies of nearly all educational books of importance published in the United States during the past year, also many foreign educational works. The volumes and pamphlets added by gift, by exchange, and by purchase numbered 1,392. Copyright transfers from the Library of Congress were 530 volumes; serial numbers accessioned, 3,984; periodical numbers, 9,134; volumes received from bindery, 434. Lack of funds prevented the purchase of many desirable books and periodicals, and the same cause held up much necessary binding during the year.

During the year the library loaned to borrowers outside the office 2,045 volumes, many of which were forwarded by mail to points away from Washington. The number of visitors registered as consulting the library amounted to 1,229 for the year.

The library answered during the year 4,589 letters requesting information or publications.

The library has made preliminary plans for a new edition of Bulletin 1915, No. 25, Statistics of Public, Society, and School Libraries, with the advice and cooperation of the committee on Federal and State relations of the American Library Association.

The assignment of a room adjoining the library as a reading room for bureau specialists and visitors has greatly facilitated the use of the library by all classes of persons consulting it.

The Chief of the Library Division contributed a section on library activities to the annual report of the Commissioner of Education for 1920. He also presented a report on methods of organization of rural library work at the annual conference of the American County Life Association at Springfield, Mass., in October, 1920, and attended the conference of the American Library Association at Swampscott, Mass., in June, 1921, as official representative of the bureau.

EDITORIAL DIVISION.

Continued difficulty in procuring the printing of the documents of the bureau marked the fiscal year 1920–21. The shortage in paper, which began during the war, became acute in the spring of 1920, and it showed little abatement during that year.

The matter was frequently called to the attention of Government officers concerned with printing, and they were cautioned formally and informally to restrict their orders as much as possible.

In March, 1920, the Secretary of the Interior approved an order that all minor publications of the department and its bureaus be issued without covers in order to save paper. In June a drastic order came from the same source by which it was directed that the amount of printing be at once reduced to a minimum, in order to avoid the suspension of all publication. It was required thereafter that every requisition for printing should be accompanied by a statement showing clearly the necessity for issuing the publication promptly, and pointing out specifically how the public interests would suffer if the printing of the publication were postponed.

Under this order, issued just before the beginning of the fiscal year 1920–21, it became necessary to hold indefinitely a number of manuscripts which otherwise would have been sent to the printer immediately after the appropriation for 1920–21 became available. A few were sent, however, for their character was such as to require immediate action.

Then another set of causes operated even more effectively than departmental orders in reducing the bureau's activity in this particular. The price of paper rose to such heights that, combined with the extraordinary costs of other materials and of labor, the appropriations allotted to this office were exhausted early in 1921, even though the requisitions had been reduced to urgent needs. With no money there was naturally no printing.

Request was made for a deficiency appropriation, but in the rush of the closing days of the short session of the Congress the clause containing the appropriation was omitted from the proper bill. It was enacted later at the special session of the Congress, but the money came too late in the fiscal year to be of much benefit, and nearly all of it lapsed into the Treasury.

The documents actually issued in 1920–21 consisted principally of reports of educational surveys conducted by the bureau, statistical reports for 1917–18, whose publication previously had been impossible, leaflets of small size, and a few documents which had been ordered long before. A list of them is appended.

When the deficiency appropriation was made available, near the end of the fiscal year, several chapters of the Biennial Survey of Education for 1918–20, with a number of other manuscripts, were at once sent to the printer. Some work was done on a few of them, but nearly all appear in the list of documents awaiting action.

School Life, the semimonthly periodical of the bureau, was issued regularly and fairly promptly to May 1, but the numbers for May 15, June 1, and June 15 were each delayed unduly by the failure of the appropriation. This periodical will in future be issued monthly, excepting July and August. Each number will, however, contain 24 pages instead of 16, as heretofore.

List of Publications.

BULLETINS, 1919.

No. 47. Private Commercial and Business Schools, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 63. Natural Science Teaching in Great Britain.
No. 65. The Eyesight of School Children. J. H. Berkowitz.
No. 73. Nurse Training Schools, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 81. Statistics of State Normal Schools, 1917–18. L. E. Blauch and H. R. Bonner. Advance sheets from the Biennial Survey.
No. 84. The University Extension Movement. W. S. Bittner.
No. 85. Development of Agricultural Instruction in Secondary Schools. H. P. Barrows.
No. 86. Administration and Supervision of Village Schools. W. S. Deffenbaugh and J. C. Muerman.
No. 87. Statistics of State Universities and State Colleges for the Year Ended June 30, 1919.

BULLETINS, 1920.

No. 7. Requirements for the Bachelor's Degree. W. C. John.
No. 8. Agricultural and Mechanical Colleges. W. C. John.
No. 9. The Feasibility of Consolidating the Schools of Mount Joy Township, Adams County, Pa. Mrs. K. M. Cook and W. S. Deffenbaugh.
No. 10. Correspondence Study in Universities and Colleges. A. J. Klein.
No. 12. Training Teachers for Americanization. J. J. Mahoney.
No. 13. Educational Work of the Commercial Museum of Philadelphia. C. B. Toothaker.
No. 16. A Survey of Education in Hawaii.
No. 17. Monthly Record of Current Educational Publications, June, 1920.
No. 18. Lessons in Civics for the Six Elementary Grades. Hannah Margaret Harris.
No. 19. Statistics of Public High Schools, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 20. Salaries in Universities and Colleges in 1920. L. A. Kalbach.
No. 21. Schools in the Bituminous Coal Regions of the Appalachian Mountains. W. S. Deffenbaugh.
No. 22. A School-Building Program for Meriden, Conn. Alice Barrows Fernandez.
No. 23. A School-Building Program for Gloucester, Mass.
No. 24. Statistics of City-School Systems, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 25. Monthly Record of Current Educational Publications, September, 1920.
No. 26. Reorganization of Science in Secondary Schools. A report of the Commission on the Reorganization of Secondary Education.
No. 27. Survey of the Schools of Brunswick and of Glynn County, Ga.
No. 28. Monthly Record of Current Educational Publications. Index, February, 1919, January, 1920.
No. 29. The National Crisis in Education: An Appeal to the People.
No. 31. Statistical Survey of Education, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 32. Monthly Record of Current Educational Publications, October, 1920.
No. 33. Educational Directory, 1920–21.
No. 34. Statistics of Universities, Colleges, and Professional Schools, 1917–18. H. R. Bonner. Advance sheets from the Biennial Survey.
No. 35. Agriculture in Secondary Schools: A Report of the Commission on the Reorganization of Secondary Education.
No. 36. Preliminary Survey of the Schools of the District of Columbia.
No. 38. Monthly Record of Current Educational Publications, November, 1920.
No. 40. The Curriculum of the College of Agriculture. Carl R. Woodward.
No. 41. The Francis Scott Key School, Locust Point, Baltimore, Md. C. A. Bennett.
No. 42. Education for Highway Engineering and Highway Transport. F. L. Bishop and W. C. John.
No. 43. Survey of the Schools of Winchester, Mass.

No. 44. Salaries of Principals of High Schools. W. T. Bawden.
No. 45. Monthly Record of Current Educational Publications, December, 1920.
No. 46. Organization of State Departments of Education. L. A. Kalbach and A. O. Neal.

BULLETINS, 1921.

No. 1. Monthly Record of Current Educational Publications, January, 1921.
No. 2. Survey of the Schools of Wilmington, Del. Part 1.
No. 3. Monthly Record of Current Educational Publications, February, 1921.
No. 4. Monthly Record of Current Educational Publications, March-April, 1921.

REPORTS.

Annual Statement of the Commissioner, 1920.
Annual Report of the Commissioner, 1919–20.

TEACHERS' LEAFLETS.

No. 7. Recreation and Rural Health. E. C. Lindeman.
No. 8. Civic Training through Service. A. W. Dunn.
No. 9. Lessons in Civics for the Three Primary Grades. Hannah Margaret Harris.
No. 11. Rural School Playgrounds and Equipment. K. C. Richmond.
No. 14. Modern Language Teaching.

LIBRARY LEAFLETS—LIST OF REFERENCES.

No. 12. October, 1920. Educational Surveys.
No. 13. December, 1920. The Use of Pictures in Education.

HEALTH EDUCATION SERIES.

No. 5. Child Health Program. (Reprint.)
No. 6. Further Steps in Teaching Health. (Reprint.)
No. 7. The Lunch Hour at School. (Reprint.)
No. 8. Health Training for Teachers.
No. 9. Your Opportunity in the Schools.
Poster. Right Height and Weight for Boys. (Reprint.)
Poster. Right Height and Weight for Girls. (Reprint.)
Classroom Weight Record. (Reprint.)
Health Education Publications. Price List.
Health Card No. 1. What is Health?
Health Education—School Life Supplements 1–8.

KINDERGARTEN CIRCULAR.

No. 6. The Child and the Kindergarten. Julia Wade Abbot. (Reprint.)

SECONDARY SCHOOL CIRCULARS.

No. 6. Junior High School Mathematics: A Preliminary Report by the National Committee on Mathematical Requirements.
No. 7. The Problem of Summer Teaching in Connection with Project Supervision. Aretas W. Nolan.

HIGHER EDUCATION CIRCULARS.

No. 20. Opportunities for the Study of Engineering at American Higher Institutions.
No. 21. Report of the Progress of the Subcommittee on College Instruction in Agriculture.
No. 22. Opportunities for the Study of Medicine in the United States. George F. Zook.

INDUSTRIAL EDUCATION CIRCULARS.

No. 5. Progress in the Preparation of Industrial Teachers. W. T. Bawden.
No. 6. Examples of Good Teaching in Industrial Education. W. T. Bawden.

HOME ECONOMICS CIRCULAR.

No. 9. Home Economics Courses of Study for Junior High Schools.

READING COURSES.

No. 1. The World's Great Literary Bibles. (Revised.)
No. 2. Great Literature—Ancient, Medieval, and Modern. (Revised.)
No. 3. Reading Course for Parents. (Revised.)
No. 4. Reading Course for Boys. (Revised.)
No. 5. Reading Course for Girls. (Revised.)
No. 6. Thirty Books of Great Fiction. (Revised.)
No. 7. Thirty World Heroes. (Revised.)
No. 8. American Literature. (Revised.)
No. 9. Thirty American Heroes. (Revised.)
No. 10. American History. (Revised.)
No. 13. The Call of Blue Waters.
No. 14. Iron and Steel.
No. 15. Shipbuilding.
No. 16. Machine Shop Work.

MISCELLANEOUS PUBLICATIONS.

Available Publications of the U. S. Bureau of Education, November, 1920.
Joy and Health Through Play. G. E. Schlafer.
Broadside—New High Schools, Etc.
Broadside—School Directed Home Gardening.
Broadside—Observance of School Week.
Broadside—History of the City School Dollar.

SCHOOL LIFE.

Volume 5, nos. 1–12.
Volume 6, nos. 1–11.
Index and title-page, vol. 4, January–June, 1920.
Index and title-page, vol. 5, July–December, 1920.

UNFINISHED PRINTING, 1920–21.

BULLETINS, 1919.

No. 88. Biennial Survey of Education, 1916–18. Vol. 1.
No. 89. Biennial Survey of Education, 1916–18. Vol. 2.
No. 90. Biennial Survey of Education, 1916–18. Vol. 3.
No. 91. Biennial Survey of Education, 1916–18. Vol. 4.

BULLETINS, 1920.

No. 30. State Laws Relating to Education Enacted in 1918–19. W. R. Hood.
No. 39. Opportunities for Foreign Students at Colleges and Universities in the United States. S. P. Capen.
No. 47. Proceedings of the Fifth Annual Meeting of the National Council of Primary Education.
No. 48. Statistics of State Universities and State Colleges for the Year Ended June 30, 1920.

BULLETINS, 1921.

No. 2. Survey of the Schools of Wilmington, Del. Part 2.
No. 5. Part-Time Education of Various Types: A Report of the Commission on the Reorganization of Secondary Education.
No. 6. Opportunities for Study at American Graduate Schools. G. F. Zook.
No. 7. Organization for Visual Instruction. W. H. Dudley.
No 9. Present Status of Music Instruction in the Colleges and High Schools in the United States. Osbourne McConathy.
No. 10. The Visiting Teacher. Sophia C. Gleim.
No. 11. Pharmaceutical Education. Advance sheets from the Biennial Survey, 1918–20.

No. 13. The Housing and Equipment of Kindergartens.
No. 14. Education of the Deaf. Percival Hall. Advance sheets from the Biennial Survey, 1918–20.
No. 15. Medical Education, 1918–20. N. P. Colwell. Advance sheets from the Biennial Survey, 1918–20.
No. 16. Special Features in the Education of the Blind. E. E. Allen. Advance sheets from the Biennial Survey, 1918–20.
No. 17. Educational Boards and Foundations. Henry R. Evans. Advance sheets from the Biennial Survey, 1918–20.
No. 18. Education in Homeopathic Medicine. W. A. Dewey. Advance sheets from the Biennial Survey, 1918–20.
No. 19. Kindergarten Education. Julia Wade Abbot. Advance sheets from the Biennial Survey, 1918–20.
No. 20. Developments in Nursing Education since 1918. M. Adelaide Nutting and Isabel M. Stewart. Advance sheets from the Biennial Survey, 1918–20.
No. 21. Higher Education. G. F. Zook. Advance sheets from the Biennial Survey, 1918–20.
No. 22. State Laws and Regulations Governing Teachers' Certificates. Katherine M. Cook.
No. 23. Monthly Record of Current Educational Publications, May–June, 1921.

SECONDARY SCHOOL CIRCULAR.

No. 8. The Function Concept in Secondary School Mathematics: Report of the National Committee in Mathematical Requirements.

READING COURSE.

No. 12. Heroes of American Democracy.

HEALTH EDUCATION SERIES.

No. 10. Suggestions for a Program for Health Teaching in the Elementary Schools.
Health card No. 2. Rules of the Health Game.
Health Education—School Life Supplement No. 9.

SCHOOL LIFE.

Volume 6, no. 12.

MISCELLANEOUS PUBLICATIONS.

The Teaching of Civics as an Agency for Community Interest and Citizenship. John J. Tigert.
The Constitution of the United States.
Available Publications of the United States Bureau of Education, September, 1921.

HIGHER EDUCATION.

During the year the specialist in higher education made an inspection of all the institutions of higher learning in the State of Arkansas, in order to classify these institutions according to a set of standards previously adopted by the college presidents of that State. The report on the inspection was submitted to the State superintendent of public instruction in May, 1921. The report will be published by the Arkansas State department of education.

In November, 1920, the specialist in agricultural education made a brief survey of the University of Tennessee. In connection with this survey the specialist in higher education made an inspection of the medical, dental, and pharmaceutical work of the university at Memphis. At the conclusion of the survey a report was prepared and submitted to the president of the University of Tennessee.

The State Legislature of Arkansas enacted a law appropriating $2,000 for a survey of the University of Arkansas and authorizing a legislative committee to invite the Bureau of Education to make the survey. The specialist in higher education was chairman of the commission which undertook the survey. The other members of the commission were: President W. M. Jardine, Kansas State Agricultural College; Dean Anson Marston, Iowa State College; Mrs. Henrietta W. Calvin, specialist in home economics, Bureau of Education; and Mr. L. E. Blauch, assistant. The report on the survey is being prepared and will be submitted to the legislative committee on or before September 1, 1921.

In connection with the educational campaign conducted by the Bureau of Education last winter the division prepared a considerable amount of mimeographed material relating to salaries in and appropriations for State universities, colleges, and normal schools. The material was used by officials of these institutions in order to prosecute their campaigns for increased funds before the State legislatures.

During the year the specialist in higher education addressed the annual meetings of the following associations: Higher education division of the National Education Association, Salt Lake City, Utah; Association of American Colleges, New York City; National Association of State Universities, Washington, D. C.; American Council on Education, Washington, D. C.; history section of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, Baltimore, Md.; Junior College Association, Chicago, Ill.; Catholic Educational Association, Cincinnati, Ohio; Association of Colleges and Secondary Schools of the Southern States, Chattanooga, Tenn.; and Association of Georgia Colleges, Atlanta, Ga.

He also delivered addresses before meetings of the college presidents, before trustees of the Church of the Brethren, Baltimore, and before the Indiana Schoolmen's Club, Indianapolis.

During the fiscal year, the division of higher education published a number of pamphlets and circulars relating to higher education, which are listed in the section on the Editorial Division (p. 12). The following circulars and pamphlets are ready for the printer: Proceedings of the Junior College Conference at St. Louis, June 30–July 1, 1921; Opportunities for the Study of Slavonic Languages and Literature at American Colleges and Universities; and Statistics of Land-Grant Colleges for the year 1918–19. The division has material on hand for the preparation of the following circulars or bulletins: Opportunities for the Study of Dental Surgery in the United States; Opportunities for the Study of Agriculture in the United States; and revisions of the bulletins on accredited secondary schools, and accredited higher institutions. Some of the foregoing are nearing completion.

LAND-GRANT COLLEGES.

The specialist in land-grant college statistics audited the annual reports of the treasurers of land-grant colleges on the expenditures of the 1862 land-grant college funds and the annual appropriations under the Morrill-Nelson Acts. He also prepared the necessary data

for the annual certification of the Secretary of the Interior to the Secretary of the Treasury and for the annual report to Congress required by law. He also prepared the annual bulletin of educational and financial statistics showing the progress of the land-grant institutions.

In October and November, 1920, the specialist in land-grant college statistics visited each of the land-grant institutions for the education of Negroes. At the conclusion of his inspection of these institutions a conference on Negro education was called by the Commissioner of Education, at Atlanta, Ga. A large number of representatives from schools and colleges for Negroes were present at the conference. It is expected that the bureau will, in the near future, publish a digest of the proceedings of this conference.

RURAL SCHOOLS.

The division of rural schools acts as a clearing house for information concerning progressive movements in rural education and general school conditions in rural communities throughout the country through correspondence, circulars of information, addresses, press articles, and the like; assists State, county, and local school officers with legislative programs, school organization and practice, consolidation, and other movements concerned with the improvement of schools in rural communities; and makes studies and reports of all matters concerning rural education in the United States.

During the year the division has prepared for and made some progress toward the completion of the following:

1. A study of the movement for consolidating schools in the open country and villages in the 48 States—the number of such schools, enrollment, courses of study, methods and cost of transportation, preparation and salaries of teachers, and the like. This study contemplates a comprehensive investigation of the history, progress, and results of consolidation throughout the country.

2. A study of the cost, courses of study, preparation of teachers, etc., in one-teacher schools in those remote communities in which consolidation is not feasible.

3. A study of homes for teachers in rural communities owned or controlled by school trustees.

4. A study of plans and provisions for the supervision of rural schools in the several States.

There have been completed for publication or distribution in some form the following: A study of dormitory facilities for high-school pupils throughout the United States; a study of former teachers employed in the War Risk Bureau; a survey of school buildings in Colorado Springs, Colo.; a survey of the school system of Currituck County, N. C.; and a study of the extent and operation of the county unit of organization for administration in the United States.

Circulars of information, and press articles, or letters have been issued on the following subjects: Rural teacher preparation in the United States; salary and shortage of rural teachers; systems for certificating teachers; educational prerequisites for teaching certificates; rural supervisors in the United States; the school building shortage in cities and towns; the school-building shortage in rural communities; developing the human wealth of North Carolina;

teacher placement and public agencies in the United States; the centennial celebration at the University of Virginia; standardization of rural schools; an account of the proceedings of general and sectional meetings of the National Education Association at Salt Lake City, and of the department of superintendence at Atlantic City; advantages and costs of consolidated schools.

Members of the division have assisted in arranging for 13 regional citizens' conferences on education; and have participated in conferences and meetings of school officers, parents, and teachers in the following States: West Virginia, South Dakota, Oklahoma, Wisconsin, District of Columbia, Virginia, Kansas, Missouri, Iowa, Illinois, Michigan, and Maryland.

CITY SCHOOL ADMINISTRATION.

The members of the City School Division devoted much of their time the past year to the school surveys of the Hawaiian Islands; Winchester, Mass.; Wilmington, Del.; Elizabeth City, N. C.; and Wheeling, W. Va. The field work on the surveys of Hawaii and Winchester was completed the latter part of the year 1919–20, and the reports prepared early in the year 1920–21.

The greater part of the time of the specialist in social and industrial relations has been given to school building surveys. There has been a wide demand for this work, owing to the great development of school building programs all over the country during the past year.

The specialist in educational systems has assisted in city school surveys the past year by investigating and reporting on administration, supervision, courses of study, methods of teaching and teacher training in the primary grades, and by conducting and tabulating educational tests in the elementary grades of those cities. A report on the reorganization of a cotton mill village school system has been successfully completed, based upon the experiences and interests of children in such localities. The report furnishes suggestive material for the work of similar schools. Special investigation of psychological tests and measurements in kindergarten and primary schools has been made looking toward the final working out of courses of study particularly adapted to different types of mental ability. The study of causes which lead to retardation in first grades has been completed and reports tabulated. Cooperation with the National Council of Primary Education as editor of the annual report has been continued by the specialist, under whose direction the bureau issues each year the proceedings of the council. Reports have been prepared by the specialist to meet requests from school officers on schoolroom theory and practice, supervision, equipment, courses of study, retardation and acceleration of pupils in first grades, and educational and psychological tests and measurements in elementary schools.

Tables of kindergarten statistics have been compiled for the bulletin, A Statistical Survey of Education for 1917–18. One table shows the number of cities and villages having kindergartens in each State, and the other the proportion of children of kindergarten age enrolled. These tables have been sent to presidents of State kindergarten associations in which legislative campaigns are in progress, to

principals of training schools, and to State and city superintendents of schools.

A new set of lantern slides showing modern activities in kindergarten and primary rooms has been prepared, and 6 sets with an accompanying lecture will be ready for extension purposes in September. The 5 sets of lantern slides which the kindergarten section has now in circulation have been in constant use in the field. The 12 sets of kindergarten charts secured during the year have proved a practical means of publicity. They have been sent to communities for use at educational meetings in North Dakota, Indiana, Ohio, North Carolina, Wyoming, Rhode Island, Florida, Wisconsin, British West Indies, and Ottawa, Canada.

Maps of the different States showing the distribution of kindergartens and kindergarten training schools in each State have been completed and will be used in the series of legislative leaflets which are in course of preparation. Enlarged maps of 17 typical States have been made for use in kindergarten campaigns.

New readers have been enrolled in the reading course for graduate kindergarten teachers from the following States: Connecticut, Florida, Massachusetts, Mississippi, New Jersey, New York, Pennsylvania, Texas, and Utah. The total enrollment represents 40 States.

Material for publication is being prepared on the following subjects: A kindergarten housing and equipment bulletin; the health aspect of kindergarten education; programs for mothers' meetings; legislative and other leaflets. In cooperation with the International Kindergarten Union, a primary curriculum is being prepared, based upon the kindergarten curriculum which has been published as a bulletin by the bureau.

Another project which is being worked out in cooperation with the International Kindergarten Union is the preparation of a moving-picture film. Sixteen cities have volunteered to provide units of typical kindergarten activities, and these will be coordinated by the kindergarten specialists into one film, which may be used in the field to illustrate both the education and the extension phases of kindergarten work.

There has been close cooperation between the kindergarten specialists and the educational departments of the Federation of Women's Clubs and the Congress of Mothers and Parent-Teacher Associations. The kindergarten section has furthered the formation of State kindergarten associations, which are a medium for uniting the efforts of all organizations in the State that are engaged in kindergarten extension.

The chief of the division prepared a program for an important educational conference to be held in Honolulu in August, 1921. Topics of far-reaching importance educationally are to be discussed by representatives from nations bordering on the Pacific Ocean.

Another conference of importance was held at the University of Pittsburgh in November to discuss the educational problems of the mining towns of West Virginia and western Pennsylvania. The conference was made up of schoolmen, social workers, and representatives of some of the coal companies.

A bulletin on the administration of schools in the smaller cities has been partly completed. All the data have been collected and nearly

all have been tabulated. This bulletin presents facts and their interpretation regarding boards of education, the promotion of pupils, salary schedules, and other phases of school administration.

A bulletin entitled "Salaries of Administrative and Supervisory Officials in the Larger Cities," prepared by the division, gives for cities of 100,000 or more population the administrative, supervisory, and clerical positions connected with the office of the city superintendent of schools and the salary attached to each position.

Numerous memoranda have been compiled from questionnaires, from city school reports, and from other sources. Some of these have been embodied in city school circulars for general distribution; others are used in making replies to letters requesting information or are published in School Life or other educational publications. Among these memoranda are: Psychological service in city schools; experience of city and country teachers; normal school enrollment in 1916 and 1919; the number and per cent of pupils promoted in each of the elementary grades in 36 cities; the city school tax rate in some of the smaller cities; the length of the school day; a comparison of the salaries of the principal administrative school officials in the larger cities for the years 1917 and 1921; reduced car fare for school children; and teachers' councils in the United States.

SCHOOL LEGISLATION.

One of the branches of the bureau's activities as a clearing house of educational information is the work of collecting and compiling the school laws, particularly the recent enactments, of the several States and giving out data relative thereto. Generally speaking, the States do not now enact new legislation in the same haphazard way as formerly, but pass their new laws more in the light of the experience of States already having similar legal provisions. It is the effort of the bureau in its school-law work to give, as far as possible, information and assistance of the kind needed by the States in conforming their new legislation to the best practice elsewhere. Within the year, the specialist in school legislation has made a formal digest of the educational enactments of the legislatures of 1920; prepared a brief interpretative review of the same enactments, which was published in the report of the commissioner; prepared a more extended review of the school legislation of the biennial period 1919–20, which was designed as a part of the Biennial Survey of Education; made special studies of school revenues and the county unit of school administration, and has given out information and assistance through correspondence and circulars. While the several legislatures were in session he distributed to State departments of education and legislative committees copies of 20 "legislative circulars" summarizing pending and enacted school legislation.

VOCATIONAL EDUCATION.

Conferences of specialists called by the Commissioner of Education were conducted as follows: (1) Specialists engaged in training teachers of manual training and industrial education in institutions in the Mississippi Valley, held in cooperation with the State University of Indiana, at Indianapolis; (2) specialists in industrial educa-

tion, held in cooperation with the Vocational Education Association of the Middle West, at Minneapolis, Minn.; (3) specialists in industrial education, held in cooperation with the National Society for Vocational Education, at Atlantic City, N. J.; (4) specialists in industrial education, held in cooperation with the Eastern Arts Association, at Baltimore, Md.

The specialist in industrial education has been detailed to field duty for an aggregate of 93 days, including conduct of the conferences of specialists referred to above; assisting in the educational survey of Wilmington, Del.; direction of the educational surveys in Elizabeth City, N. C., and Wheeling, W. Va.; representing the bureau at educational conventions; and similar duties. For approximately one-fourth of the time he has been assigned to special duties as assistant to the commissioner.

HOME ECONOMICS.

The work of the year has developed along two general lines: First, field work, which may be subdivided into participation in educational surveys, investigations into the teaching of home economics in universities, colleges, normal schools, and in city schools, visits to cities and State educational institutions for the purpose of participation in conferences and educational association meetings, and giving addresses before groups of persons interested in home economics education; second, office work, which has consisted of writing survey reports, work upon material for publication, caring for the correspondence relating to home economics education, preparing questionnaires and studying returns, planning programs for home economics meetings, and holding office conferences with official visitors from this and other countries.

Assistance was given in four educational surveys, viz: Wilmington, Del., city schools; Elizabeth City, N. C., city schools; Wheeling, W. Va., city schools; and the University of Arkansas, which necessitated visits to the city schools of Little Rock, Ark., the normal school at Conway, Ark., the agricultural school at Russellville, Ark., and the State university at Fayetteville, Ark. Each of these surveys required about two weeks of time away from the office. The Arkansas survey took slightly longer because of the distance to be traveled going and coming.

Twenty-six home economics departments in colleges, normal schools, and city school systems in 12 different States were visited. Investigation was made of the courses given, the methods of teaching in vogue, the equipment of rooms, and the general status of home economics teaching. In almost all places visited one or more addresses were given to the students and teachers of home economics, and frequent conferences were held.

Fifteen educational conferences and meetings of educational associations were attended. At these conventions, meetings were conducted, addresses given, committee service rendered, and programs arranged.

The demand for assistance at various educational conferences was much greater than could be supplied, and many invitations were of necessity refused.

The home economics division assisted the Civil Service Commission in preparing an examination for Public Health Service dieticians,

and assisted in grading papers of same; completed the preparation of material for a bulletin entitled "Reorganization of Home Economics Courses in Secondary Schools"; and published a bulletin on rural school hot lunches.

COMMERCIAL EDUCATION.

During the year the commercial education division concluded the series of 12 regional conferences on business training and commercial education which were begun in the spring of 1920. It also began the organization, with the cooperation of the several States, of a business education investigation survey to carry on the work in the States as proposed at the preceding 12 regional conferences.

On invitation of the State Board of Education of Indiana the bureau's specialist in commercial education, in company with the State supervisor of teacher training, inspected in October, 1920, certain educational institutions in that State with the object of making recommendations in respect to the teaching of commercial branches and training of commercial teachers. Their recommendations in first draft were tentatively approved by the committee on teacher training of the State board of education. It is planned to have these recommendations in final form adopted early in the school year 1921–22.

The situation in Indiana calls for a teacher-training course one to four years, each section of which, namely, a one-year, two-year, three-year, or four-year course, is complete in itself; graduation from any one of which implies preparation in a school or college of a certain type and qualifications to teach in a school of certain grade. The course of study must not only therefore show proper sequence in respect to subject matter but must be built in consideration of the kind of commercial training given or to be given in the type or grade of school for which the teacher-training courses prepare. A tentative course of study in preparation for business and commerce, from the seventh to the twelfth grades, will be found in the chapter entitled, "Business training and commercial education" in the forthcoming Biennial Survey of the Commissioner of Education.

Reports on the following subjects have been prepared or begun for publication as bulletins and circulars of the bureau: Educational preparation for foreign service; training for business and commerce in colleges and universities; special career courses in private business schools; commercial teacher training; commercial education in Latin-America; and commercial education, with special emphasis on training for foreign service in countries other than the United States.

During the year the specialist in commercial education was invited as hitherto to deliver addresses at colleges, universities, normal schools, city high schools, teachers' associations, manufacturers' associations, chambers of commerce, etc.

The specialist in commercial education is chairman of the committee of fifteen on educational preparation for foreign service. This committee, which is served by an advisory council of one hundred, is composed of men and women prominent in governmental, business, and educational affairs. As charged by the Commissioner of Education, in the appointment of this committee, the latter is constantly making investigation of all educational means

for foreign service, recommending courses of study for the different grades and types of education, and promoting ways and means for the effective carrying out of the suggested courses of study.

Another committee of which mention should be made, and of which the bureau's specialist is chairman, is that of the committee on commercial engineering, appointed likewise by the Commissioner of Education. This committee has been active only two years, but in that time has succeeded in having one or more of its curricula suggestions adopted in about one-fourth of the engineering colleges of the United States.

For several years the specialist in commercial education has been intimately identified with a number of national and international organizations interested in training for business and commerce and in educational preparation for foreign service, governmental as well as business. Among these associations may be mentioned the United States Chamber of Commerce, the National Foreign Trade Council, the American Manufacturers' Export Association, the Pan-American Financial Conference, the Committee on Cooperation with Latin-American Universities of the American Association of University Professors. The work of the commercial education section, through these and other associations, has been greatly strengthened by this contact.

HOME EDUCATION.

The extension of educational advantages into the home for those who have had limited opportunities for education but who wish to further their own education has been the main purpose of the home education division for the past seven years.

In organizing the work the purposes were outlined and carried out as far as possible with the following activities in view: To help parents to further their education, to help them in the care and training of their little children before they are of school age, to help the boys and girls to further their education after they have left school, and to promote a closer cooperation of home and school.

The homes were reached in a very definite way through county superintendents of schools. The demands pointed the way in which the work has developed. First, there was a great demand for selected reading courses, and second, a demand for help in organizing parent-teacher associations and for material to use at such meetings. Because of limited clerical assistance it has been impossible to maintain more than two of the activities with vigor, and gradually the main activity has been to carry on the home-reading work. During the past year the rural teachers' reading circle work has been carried on with other reading work.

In connection with this work during the first three months of the present year 7,117 requests for reading courses were received. Ohio and Illinois have been most active in this respect.

During the past year 1,435 new readers were enrolled and 58 certificates were issued to persons completing courses according to requirements. The total number of enrollments in all courses has been about 14,435.

It has been the plan to get the cooperation of State superintendents of public instruction and directors of extension in State universities or normal schools in carrying on this work. A uniform plan has

been adopted by all institutions cooperating. This plan has been accepted by 15 States in all, 6 of them taking up the work this year. The States in cooperation are: Utah, Louisiana, Washington, Oregon, North Carolina, Arkansas, Iowa, Indiana, North Dakota, South Dakota, Kentucky, Virginia, Arizona, South Carolina, and Wisconsin.

The outline of the plan of cooperation is as follows:

Cooperation of State superintendents of public instruction: (1) Approve the plan; (2) recommend to State higher institutions, such as State universities or normal schools, the advisability of extending educational opportunities in this way to all in the State; (3) sign certificates jointly with the commissioner and representative of State higher institutions.

Cooperation of Bureau of Education: (1) Appoint a special collaborator in each State institution cooperating and furnish stationery; (2) prepare and print reading courses; (3) prepare and print form letters; (4) prepare and print certificates; (5) continue publicity; and (6) keep an index of all readers.

Cooperation of collaborators: (1) Receive papers of readers who live in the State; (2) read and pass on the papers or appoint some one in the institution to do so; (3) keep record of readers; and (4) notify the bureau and the State education department when readers have completed their courses, and notify the bureau of new enrollments. To operate this plan necessitates the preparation of various materials and considerable correspondence. Special certificates are issued to States cooperating with the bureau. Each certificate is signed by the State superintendent of public instruction, the director of extension, and the United States Commissioner of Education.

Five after-war reading courses have been printed during the year and two new courses have been issued in mimeograph form. In all upward of 53,445 reading courses have been distributed.

The following courses are now available for distribution:

1. Great Literary Bibles.
2. Masterpieces of the World's Literature.
3. Reading Course for Parents.
4. Miscellaneous Reading for Boys.
5. Miscellaneous Reading for Girls.
6. Thirty Books of Great Fiction.
7. Thirty World Heroes.
8. American Literature.
9. Thirty American Heroes.
10. American History.
11. France and Her History.
12. Heroes of American Democracy—What Yesterday Means for To-Day.
13. The Call of Blue Waters: A Reading Course of Seamanship, Navigation, and Marine Engineering for Men in the Service and the Merchant Marine.
14. Iron and Steel: A Reading Course on the Manufacture of Iron and Steel, Including the Blast Furnace, Metallurgy of Steel, and Its Manipulation into Various Products.
15. Shipbuilding: A Reading Course on the Shipbuilding Industry—the Shipyard—Steel Ships—Preparing the Framework—Erecting the Hull—Wood Ships and Ship-Fitting.
16. Machine Shop Work: A Reading Course on Machine Shop Work in Its Various Branches.
17. Foreign Trade: A Reading Course on Merchandising, Shipping, and Financing.
18. Reading Course on Dante.
19. Master-Builders of To-Day.

During the year the division has received 271 requests for assistance in organizing and making programs from parent-teacher associations. These have been answered by letters or bulletins. Ohio, Texas, Michigan, New York, Indiana, and California have made the most demands upon this office.

This division has received 14,714 letters and has sent out 7,470 letters and 620 bulletins.

SCHOOL HYGIENE AND PHYSICAL EDUCATION.

The necessary work of this division includes investigation and promotion along all the lines of hygiene as it affects education—the hygiene of the school plant, the hygiene of school management, administration of health supervision of schools, the teaching of health, physical education, and the education of handicapped and defective children. Each of these has numerous subdivisions and ramifications. Information and advice are sought upon all of these matters from teachers, school officers, and others. Whenever a survey of a school system is undertaken all of these aspects of school hygiene must be investigated.

With the limited personnel of the division it has been impossible to do intensive work along all of these lines. The office routine and correspondence have been covered somewhat incompletely, but only two phases of the work have been given more than routine attention—health teaching and schoolhouse construction. Members of the division took part in the survey of the Wheeling school system.

Health teaching.—During the past year the division has centered its forces mainly on stimulation and encouragement of health teaching in the schools of the country. The office and field work may be roughly classified into three groups: (1) Work with people already familiar with the program, i. e., filling demands for material, giving advice through letters to teachers, nurses, and other school workers, conferring with visitors, members of various organizations, and members of the bureau on ways and means of coordinating activities; (2) reaching the new people through publicity, printing and distributing pamphlets and posters, and talks to institutes, teachers' associations, etc.; (3) research work, which includes the gathering and organizing of material for effective use.

(1) The correspondence for this division has almost doubled the past year, amounting to 11,475 pieces. This includes letters from teachers, nurses, mothers, school authorities, organizations, public officers, and foreign countries.

(2) Printing: Two new pamphlets have been added to the Health Education Series, "Health Training for Teachers," by Dr. Robert Leavitt, and "Your Opportunity in the Schools," by Dr. L. Emmett Holt. A third pamphlet, "Suggestions for Teaching Health in the Grades," in press, is probably the most important pamphlet in the series. The Health Education Series has proved very popular; in all 187,411 copies of these publications have been distributed free of charge and 373,621 copies have been sold through the Government Printing Office. There have been sent out with School Life nine Health Education Supplements, in which are given concrete examples of health work carried on by teachers and other workers in the schools. These have proved a popular innovation.

(3) Field work: This is the first year that any field work in this subject has been done by the bureau. In one month the special agent in health education visited 13 or more cities in 11 States from Alabama to Oregon, giving approximately 40 lectures.

During four months in the field the specialist in rural schools attached to this division visited 35 towns or counties in 14 States, all except 2 in the South. She reached 17 normal schools and colleges, 54 graded schools, 15 teachers' associations and institutes, 11 parent-teacher associations, and miscellaneous meetings, giving about 150 talks. The aggregate attendance was 15,281. The response has proved the need and value of this field work. The requests for field work have been far greater than could be met out of the limited travel funds and with the workers available.

Schoolhouse construction and sanitation.—The bureau has had the part-time service of a special agent for schoolhouse planning, stationed at the George Peabody School for Teachers, Nashville, Tenn. His work has included both office and field service. Under the former he has handled a large and important correspondence bearing on the construction of school buildings, with especial reference to hygienic considerations; and has prepared suggestive sketches for schoolhouses for correspondents from all parts of the country, but especially for correspondents from the South. He has corrected sketches for school buildings sent him for criticism and advice by school architects from all parts of the country; and has conferred with architects who have visited Nashville to consult him with respect to school-building plans, chiefly from Alabama, Mississippi, Louisiana, and Tennessee. Under field service he has assisted the bureau staff in the surveys of the school systems of Wilmington, Del., and Wheeling, W. Va.; has spoken as a bureau representative on schoolhouse planning and construction and other matters of school hygiene at meetings and conventions; and has visited a number of cities and towns in Alabama, Tennessee, Kentucky, and Virginia, to confer and advise with boards of education and other school officers in regard to school buildings and grounds.

FOREIGN EDUCATIONAL SYSTEMS.

The division of foreign educational systems has endeavored to keep clearly in mind its function as an agency of accurate educational information of all countries outside of the United States; to note educational movements and record progress; to give accurate account of the nature and operation of the principal school systems of the world; to organize, interpret, and evaluate this material in the light of the educational system of the United States; to diffuse this knowledge among the educators of the country through correspondence, lectures, conferences, and published reports.

Each year special attention is directed first to those educational movements offering the greatest promise, but effort is constantly exerted to perfect records and keep at hand the main features of all important school systems.

Letters of inquiry have been promptly dispatched; information on educational movements and changing conditions of school systems has been gathered, evaluated, and the essentials recorded; the educational literature, including school and consular reports, has been

read, sifted, studied, and filed for future reference; conferences have been held to aid in distributing desirable information. In addition to the above usual routine of the office, reports and papers on various phases of education in foreign countries have been prepared for publication.

The foreign education division is at present devoting special attention to gathering material on educational expenditures; the status of physical education in foreign countries; market for and use of scientific school supplies; opportunities for the interchange of students, teachers, and university professors; accurate evaluation of school credits from abroad in terms of similar credits from the schools of the United States; a comparative study of the essential features and their worth of the more progressive school systems.

ACTIVITIES IN ALASKA.

The work of the Bureau of Education among the native races of Alaska includes the maintenance of the schools, the furnishing of medical relief, the fostering of commercial enterprises in the villages, the oversight of the reindeer industry, and, to a limited extent, the support of destitute adults and orphans.

During the year the field force in Alaska consisted of 6 superintendents, 134 teachers, 8 physicians, and 15 nurses. Sixty-seven schools were in operation. In addition, it was necessary to maintain orphanages at Kanakanak, on Nushagak Bay, and at Tyonek, on Cook Inlet, for the support of children left orphans as the result of the epidemic of influenza which prevailed in those regions during 1918 and 1919.

By the opening of schools in the villages of Angoon, in southeastern Alaska, at Chitina, on the Copper River, and on the Aleutian Islands Akutan and Umnak, the work of the Bureau of Education was extended into regions not hitherto reached.

For the support of the medical work of the bureau among the natives of Alaska during the year Congress appropriated the sum of $90,000 to be expended with the advice and cooperation of the United States Public Health Service. Hospitals were in operation at Juneau, Kanakanak, Akiak, Nulato, and Noorvik; 8 physicians and 15 nurses were employed. Each school has a carefully selected stock of medicines and supplies for use by the teacher in relieving minor ailments of the inhabitants of the village in which the school is located.

Cooperative store companies, capitalized with the natives' own money and managed by the natives themselves, with the advice and oversight of the teacher, are maintained in 10 villages. These organizations are of great financial and educational benefit to the villages in which they are located. In several settlements sawmills producing lumber for local use and for sale in neighboring communities are in successful operation. The accounts of these companies are audited annually by representatives of the bureau. The two most important of these enterprises are at Metlakatla and Hydaburg in southeastern Alaska.

Instruction in agriculture is being developed through school gardens, with very gratifying results, especially in the Kuskokwim, Kotzebue Sound, and Upper Yukon regions. There is, however, a

natural tendency on the part of some of the natives to leave their homes in order to hunt and fish before the crops have matured.

Most of the reindeer herds are in remote regions from which reports have not yet been received. If there has been the usual increase of 20 per cent during the year, there should now be in Alaska at least 216,000 reindeer, of which approximately 70 per cent belong to the natives.

In 1920 Congress made an appropriation to enable the Bureau of Biological Survey, Department of Agriculture, in cooperation with the Bureau of Education, to investigate and improve the reindeer industry. During the summer of 1920 the Chief of the Biological Survey proceeded to Alaska to organize this work, taking with him two grazing experts, an expert on parasites and diseases of animals, and a field naturalist. Unalakleet, on Norton Sound, in a region where there are numerous herds of reindeer, was selected as the best center from which to conduct necessary investigations and experiments. At Unalakleet, the Bureau of Education supplied the Biological Survey with a building for use as a laboratory. Reindeer herds are now distributed among the principal native settlements from Point Barrow to the Alaska Peninsula. There are still, however, regions into which the reindeer industry should be extended. In the delta between the Yukon and Kuskokwim Rivers there are hundreds of natives living in abject poverty, who have never been reached by any civilizing influences. The establishment of schools and reindeer herds in this primitive region would be a most potent uplifting influence. The regions tributary to the Government railway in Alaska should be stocked with reindeer. On the untimbered slopes of the Alaska range there is unlimited pasturage for reindeer. The introduction of the reindeer industry into this district would increase the tonnage of the railway and furnish a new source of meat and leather from a region which has no value for other purposes.

Advantage has been taken of the authority granted by Congress for the sale of surplus male reindeer belonging to the Government and the use of the proceeds of such sales in the extension of the industry. The amount received from this source up to June 30, 1921, was $762.62.

The Bureau of Education must of necessity locate its schools in the places where the natives have their villages. In western and northern Alaska most of these settlements are far from the routes of a few steamers which visit those regions at irregular and infrequent intervals during the short season of open navigation. Consequently each summer the bureau is confronted with the problem of securing suitable vessels in which to send the teachers and supplies to those almost inaccessible places. Suitable transportation can be secured only by payment of excessive charges. Occasionally it has been necessary to send teachers and supplies in vessels which were unfitted for the purpose. Experience has shown that the bureau's work in western and northern Alaska can not be conducted effectively and economically until it owns and controls its own vessel. In compliance with the request for a vessel suitable for use by the Bureau of Education in its Alaskan work, the Navy Department transferred to the Department of the Interior the U. S. S. *Boxer*, a wooden vessel with a carrying capacity of 450 tons and admirably adapted for the purpose contemplated. However, it has not yet been possible to se-

cure from Congress the appropriation necessary to cover the expense of fitting the *Boxer* for Arctic service.

II. EDUCATIONAL SURVEYS, CONFERENCES, AND CAMPAIGNS.

EDUCATIONAL SURVEYS.

One of the functions of the Bureau of Education is to make or direct surveys of State, county, and city school systems, and of individual schools or groups of schools, and report the results of its investigations, together with constructive recommendations, to the proper authorities. This activity of the bureau is in accordance with the act of 1867, which provides for the establishment of a bureau of education. Many important pedagogical problems have been analyzed and brought nearer to solution through the instrumentality of these surveys. During the year the following surveys were undertaken and brought to a successful conclusion: City schools—Wilmington, Del.; Wheeling, W. Va; Elizabeth City, N. C.; Athens, Ga.; Raleigh, N. C.; Colorado Springs, Colo.; Washington, D. C. County schools—Currituck County, N. C. Higher education[1]—University of Arkansas, University of Tennessee, and Massachusetts Agricultural College.

WILMINGTON, DEL.

The survey of the school system of Wilmington, Del., was under the direction of the Chief of the City Schools Division, who was assisted by four other members of the division, by other members of the bureau, and by several persons not connected with the bureau. This survey embraced practically every phase of the school system—administration and organization, school buildings and teaching, courses of study in the elementary and high schools.

The survey commission recommend that the board of education and the management of school finances be reorganized in keeping with modern administration. It was urged that the board, which now comprises 13 members, 12 of whom are elected by wards, be reduced to 7, and that they be either elected at large or apportioned between the two State senatorial districts into which Wilmington is divided. The commission further recommended that the board reorganize its work in such a way that it will be relieved of the multitude of petty details with which its time is now occupied, and thus be left free to give its attention to the larger matters of general policy.

In school finances it was recommended that such legislative changes be made as will free the board from the control of the city council. And, finally, the commission recommended that the board adopt an accounting system that will show clearly what becomes of the moneys expended by the school department. Wilmington does not now have any knowledge of what important school activities are costing. The commission submitted the details of a plan which will give the information that the board should have concerning its disbursements.

It was found that the most important and insistent need in Wilmington is the scrapping of all of the school buildings, with the single

[1] Mentioned under "General Activities of the Bureau, Higher Education," p. 14.

exception of the high school, and the construction of an entirely new plant equipped with modern facilities. Of 30 elementary schools for white children in Wilmington, 12 were built before 1875, and of these 5 date back to the fifties. Only 3 buildings have been erected within the past 15 years. These old buildings were constructed on the plan of the Lancastrian schools, and have been added to and patched up from time to time. In consequence, from the standpoint of ventilation, lighting arrangements, and healthfulness of surroundings the school plant of Wilmington is in a very bad condition. Furthermore, the buildings are all small, none accommodating more than 800 children, and 14 enrolling fewer than 400. None of them has a playground. It is clear, therefore, that Wilmington should rebuild her entire school plant along modern lines, one of the first essentials being the consolidation of the schools into fewer buildings, each of them larger and fully equipped with adequate grounds and facilities for a modern type of education. Furthermore, plans should be laid not only to relieve present congestion but to anticipate the growth for a period of 10 years. To meet these conditions the commission has elaborated three possible plans and shown the advantages of each.

WHEELING, W. VA.

The survey of the public schools of the independent school district of Wheeling, W. Va., was undertaken at the request of the board of school commissioners of that city. The survey was under the direction of the assistant to the Commissioner of Education, assisted by five members of the staff of the Bureau of Education, and a number of educational specialists from outside the bureau. Despite unfavorable conditions many commendable features were found to have been introduced into the public schools of Wheeling by its board of school commissioners, among which may be enumerated medical inspection or health service, free textbooks, an unusually extensive series of courses for vocational, industrial, commercial, and home-making training, teachers' pension system, evening schools, Americanization classes, etc. Difficulties in administration were found, owing to the unwieldy size of the board, which has an unusually large number of standing committees—10 in number—each of which performs important functions properly belonging to the board itself. Four of these committees are each as large as the entire school board of New York City, and the smaller committees are each the size of the entire school board in Albany or Troy. Adding these 10 functional boards to the 7 local or subdistrict boards, and the composite board in which they all belong, one may realize something of the complexity of the organization and the possibilities for scattering responsibility.

The fundamental weakness in the public school system of Wheeling has been executive management by laymen. The board should occupy itself mainly with directorial and inspectional functions, leaving detailed executive labors to their specialized and experienced executive officials—the superintendent of schools and his subordinates. New legislation is essential to correct these conditions. But only the more general and fundamental things should be accomplished by State legislation, matters of detail being left to the by-laws, rules, and regulations, and other legislation by the board.

As regards school financial and business procedure, the survey commission recommended the establishment of a business department to be headed by a subexecutive who should report to the board via the superintendent of schools, the adoption of modern accounting methods and procedure, and an up-to-date budget system. Such a budget should be prepared on the basis of functions and should include the originating of department estimates by the heads of the various school departments. All phases of the school system of Wheeling were carefully studied by the commission, and a summary of the principal conclusions and recommendations was published by the bureau, on March 12, 1921, in a pamphlet of 53 pages, for immediate distribution in printed form to the members of the board and others interested. Accompanying this summary were partial reports, or sections of the report, which present a portion of the supporting evidence and the argument for certain of the recommendations. The effort was made by the Commissioner of Education to get as much as possible of the report into the hands of the president of the board of education in time for appropriate action in the emergency caused by the early termination of the recess taken by the West Virginia State Legislature.

BUILDING SURVEYS.

Since June, 1920, school-building surveys have been made in the following cities: Elizabeth City, N. C.; Wilmington, Del.; Colorado Springs, Colo.; Wheeling, W. Va.; Athens, Ga.; Raleigh, N. C.; and Washington, D. C. In making these school-building surveys the programs and estimates of costs are worked out on the basis both of the traditional plan of school organization and also on the basis of the work-study-play plan, sometimes called the platoon plan, of school organization.

One advantage of the work-study-play plan, or platoon plan, is that it makes it financially possible for children in the public schools to have not only adequate classroom accommodations but such modern school facilities as auditoriums, gymnasiums, playgrounds, manual-training shops, science laboratories, home economics, drawing, and music rooms. It accomplishes this by operating the school on the same principle upon which all other public-service institutions are run—that is, upon the principle of multiple use of facilities for all times. This plan, recommended for adoption in the cities surveyed, calls for only half the usual number of classrooms. For example, in a 30-class school only 15 classrooms would be needed. The average cost of a classroom unit at the present time on the basis of 30 cents per cubic foot is $12,000. Therefore fifteen times $12,000 is released for all other special facilities. This means that the cost of school buildings is greatly reduced under the work-study-play plan, or platoon plan, but what is more important, it means that the public-school children can have the opportunity for healthy work and play as well as for study.

Exclusive of the school-building survey of Washington, D. C., which is not yet completed, the school-building budgets in the cities surveyed amounted to $11,739,091 on the old or traditional plan. On the work-study-play plan the building budgets amount to only

$7,516,591, which would effect a saving of $4,222,500 if the recommendations of the survey reports are adopted.

The survey of the school system of Elizabeth City, N. C., was under the direction of the assistant to the commissioner. Three members of the city school division assisted in this survey.

CURRITUCK COUNTY, N. C.

The survey of the school system of Currituck County, located in the northeastern part of North Carolina, on the Atlantic coast, was made at the request of the county board of education. It was conducted by one of the specialists in rural education, Mrs. Katherine M. Cook. The inquiry aimed to consider the system of schools for white children as it is and as it should be in order to accord with progressive ideas and to offer the best possible educational advantages to the greatest number of children. The following is a summary of recommendations made: (1) Substantial increase of school funds; (2) consolidation of schools according to plan outlined; (3) new buildings which meet modern requirements in appearance, arrangement, and equipment; (4) reorganization on the 6–3–3 plan; a course of study based on the life and needs of the community and harmonizing with such reorganization; (5) adequate staff of prepared supervisors, principals, and teachers; (6) salary schedule based on preparation, experience, and meritorious service, applying alike to all parts of the country; (7) provision for enforcement of compulsory attendance law and systematic effort to promote regularity of attendance; (8) the school term of nine months for all schools; (9) adoption of an effective system of cost accounting and of collecting data and keeping records.

EDUCATIONAL CONFERENCES.

The following conferences were called by the bureau during the fiscal year ended June 30, 1921:[1]

Conference to consider the needs and means of improving the conditions of junior colleges, St. Louis, June 30 to July 1, 1920.

Regional conferences on education at: Chicago, for Wisconsin, Michigan, Illinois, Indiana, and Ohio, November 29, 1920. St. Paul, Minn., for North Dakota, South Dakota, Minnesota, and Iowa, November 30, 1920. Butte, Mont., for Montana, Idaho, and Utah, December 2, 1920. Portland, Oreg., for Washington and Oregon, December 4, 1920. Sacramento, Calif., for California, Arizona, and Nevada, December 6, 1920. Denver, Colo., for Wyoming, Colorado, and New Mexico, December 8, 1920. Kansas City, Mo., for Missouri, Nebraska, Kansas, Oklahoma, and Texas, December 10, 1920. Memphis, Tenn., for Kentucky, Tennessee, Alabama, Mississippi, Arkansas, and Louisiana, December 11, 1920. Columbia, S. C., for North Carolina, South Carolina, Georgia, and Florida, December 13, 1920. Baltimore, Md., for Delaware, Maryland, West Virginia, and Virginia, December 15, 1920. New York City, for New

[1] Members of the bureau staff were appointed and met several times to draw up plans and recommendations for an educational campaign planned as a result of the citizens' conference held in May, 1920.

York, Pennsylvania, and New Jersey, December 18, 1920. Boston, for Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island, December 19, 1920.

Conference on Negro education, for interchange of experience and laying of plans for work of the Negro agricultural and mechanical colleges of the Southern States, Atlanta, Ga., November, 1920.

Citizens' conference on education, Jefferson City, Mo., January, 1921.

Citizens' conference on education, Charleston, W. Va., January, 1921.

Conference on rural education, Daytona Beach, Fla., January, 1921.

Conference on Americanization and citizenship, Atlantic City, N. J., February, 1921.

Conference on commercial education, Minneapolis, Minn., February, 1921.

Conference on highway engineering, Ann Arbor, Mich., February, 1921.

Conference on industrial education, Atlantic City, N. J., February, 1921.

Conference on industrial education, Minneapolis, Minn., February, 1921.

Conference on rural education, Lansing, Mich., February, 1921.

Conference of specialists in vocational supervision, Baltimore, Md., March, 1921.

National conference on the community center, Washington, D. C., April, 1921.

Conference on rural education, Huntsville, Tex., April, 1921.

Conferences on education, Ada, Alva, and Durant, Okla.; Warrensburg and Marysville, Mo., June, 1921.

Citizens' conference on education, Des Moines, Iowa, June and July, 1921.

REGIONAL CONFERENCES ON BUSINESS TRAINING AND COMMERCIAL EDUCATION.

Twelve preliminary conferences, called by the Commissioner of Education and held with local cooperation at a strategic point within each region, were conducted under the personal direction of the bureau's specialist in charge of commercial education between April 10 and October 30. The major purpose of these conferences was to perfect plans for securing better types of business training, which shall be more purposeful through their adaptation to the industrial and commercial resources and development peculiar to each region. Administrative teachers of business and commerce, representing colleges and universities, normal schools, and secondary schools, were invited to attend these conferences, and attempt by discussion and conference action a constructive regional solution of the three leading problems in commercial education to-day, owing to the increasing demand of business for a larger supply of students and graduates of schools and colleges trained in vocational and higher technical commercial subjects. These problems are commercial teacher training, college-entrance credits in commercial branches, vocational commercial subjects in relation to (*a*) general training

and (*b*) regional or local demands of business for students trained in vocational and professional commercial subjects.

At each conference a regional cooperating committee was appointed to continue and carry out the work of the conference. The State commissioners or superintendents of public instruction are members ex officio of their respective State and regional committees. The specialist in charge of commercial education of the United States Bureau of Education is chairman ex officio of all regional committees. The regional committees plan and construct, in cooperation with the Bureau of Education, a better articulated and coordinated course of study in preparation for business and commerce that will not only give to business, as the need presents itself, boys and girls trained for the more elementary types of business service, more or less routine in character, but will early lay the foundation with proper sequence in those subjects upon which the universities must build their courses for further training and education in the major fields of commercial production and distributions, of finance, and of foreign, public, and social service.

The first 9 of the series of 12 conferences were held in April, May, and June, 1920. The remaining 3 were held in October, 1920, as follows:

Regional conference No. 10, consisting of North Dakota, South Dakota, and Minnesota. Held Saturday, October 16, at the University of Minnesota, Minneapolis, with the local cooperation of the city superintendents of schools of Minneapolis and St. Paul and the University of Minnesota.

Regional conference No. 11, consisting of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut. Held Saturday, October 23, at Boston University, Boston, with the local cooperation of Boston University, Harvard University, Tufts College, Simmons College, and the city superintendent of schools of Boston.

Regional conference No. 12, consisting of the District of Columbia, Maryland, eastern Pennsylvania, Delaware, New Jersey, and eastern New York. Held Saturday, October 30, at the University of Pennsylvania, with the local cooperation of the University of Pennsylvania, Temple University, Drexel Institute, and the superintendent of schools of Philadelphia.

COMMERCIAL EDUCATION CONFERENCE, MINNEAPOLIS, MINN., FEBRUARY, 1921.

Upon the invitation of the president of the Vocational Education Association of the Middle West, the Commissioner of Education called a conference of commercial educators at Minneapolis, Minn., on February 19, in conjunction with that association. A similar invitation was extended and accepted for the next annual meeting of this association to be held in Milwaukee, in January, 1922. It is expected that these two conferences will inaugurate a series of meetings as helpful to the subject of commercial education as have been to industrial education the series of dinner conferences in the latter field held at the same time and place under the direction of the bureau's specialist in industrial education.

RURAL EDUCATION CONFERENCES.

Indiana.—At the request of Gov. Goodrich and State Superintendent Hines, of Indiana, a Federal and interstate conference was held at the Indiana State Normal School, Terre Haute, October 18, 19, and 20. Twelve States were represented in the meeting. President Parsons, of the Indiana Normal School, now a State teachers' college, required his faculty and student body to attend every session of the conference. Five hundred dollars was guaranteed by the Greater Terre Haute Club for the expenses of the conference. About $450 of it was used.

Virginia.—On invitations from Gov. Davis and State Superintendent Hart, of Virginia, two conferences on rural education and country life were held simultaneously in that State, November 11 to 14, both inclusive, one at the Farm Life School, 12 miles in the country from Danville, and the other at the State Normal School for Women at Farmville. The Whitmell Farm Life School, which is a consolidated school serving an area of about 30 square miles, is located in a prosperous progressive farming community. A "Better Schools Parade" was held there on November 12. Over a thousand country children were in line of march, with at least 4,000 country people viewing the parade. President Jarman, of the State College for Women at Farmville, required his faculty and student body to attend every session of the conference there. Many citizens of Farmville and surrounding country attended this meeting. Sunday at each of these conferences was devoted to a discussion of the country church as a factor in the improvement of country schools and country life, with speakers especially fitted to discuss this question. Whitmell and Farmville each contributed about $300 for the expenses of the meeting.

Florida.—A Federal and interstate conference was held at Daytona Beach, Fla., January 21 to 24, inclusive. On the roll call of States at the first session of this conference, 31 States and 4 foreign nations responded. Urgent invitations to hold this conference had been made early in the fall of 1920 by the governor and State superintendent of Florida, and by President Holmes, of the Florida Assembly and Forum. The smallest attendance at any session was about 500 and the largest attendance over 3,000. Sunday was made a red-letter day for the country church.

Michigan.—The Hon. T. E. Johnson, State superintendent of public instruction, Lansing, Mich., having attended the Terre Haute conference, was urgent in his invitation for a conference at Lansing. In accordance with his invitation, a Federal and interstate conference was held there February 22 to 24, inclusive. About 15 States were represented on the program. Several prominent educators, on their way to a meeting of the Department of Superintendence at Atlantic City the next week, stopped over for the Lansing conference. This was counted one of the best conferences of the year. Five hundred dollars was contributed for the expenses of this conference by the State of Michigan.

Texas.—A Federal and interstate conference was held at Sam Houston Normal Institute, Huntsville, Tex., on April 24 to 26, inclusive, nine States being represented. Some of the leading rural workers of the South were in attendance and took part in the program.

This conference opened on Sunday afternoon, April 24. Again the country church was discussed as a factor for the improvement of country schools and country life. On Tuesday night, at the last session of the conference, the student body of Sam Houston Normal Institute presented the companion play of "Back to the Farm"—"The Kindling of the Hearth Fires"—to an audience of over 1,500 people. This institution contributed $500 to the expenses of the conference. Here, as at other State normal schools and State teachers' colleges already mentioned, President Estill required his faculty and student body to attend every session of the conference. A large number of country people attended this conference.

Oklahoma.—Upon the invitations of the presidents of the State normal schools at Alva, Ada, and Durant, Okla., seconded by the governor and State superintendent of public instruction of that State, conferences on rural education and country life were held at each of these places in consecutive order, as follows: Alva, June 19 to 21, inclusive; Ada, June 22 to 24, inclusive; and Durant, June 25 to 27, inclusive. The three schools together contributed a little over $1,800 with which to pay the expenses of the noted speakers on the programs at these meetings. At least 10 States were represented on the program at each meeting. The expenses of 17 professional rural workers and country-life leaders were paid by these institutions.

Missouri.—On invitations from State Superintendent Baker and President Hendricks, State Teachers' College, Warrensburg, Mo., a Federal and interstate conference on rural education was held at Warrensburg June 27 to 29, inclusive. The second day of the conference at Warrensburg marked the semicentennial celebration of the founding of this institution. Gov. Hyde, State Superintendent Baker, Dr. A. E. Winship, and the Commissioner of Education were the speakers here. This institution through President Hendricks contributed $500 toward the expenses of the speakers.

Iowa.—On June 30, the Federal and interstate conference called by the former Commissioner of Education was opened by the new Commissioner of Education at the time set in the original act. As all the preliminary work for this conference was done during May and the first half of June in the school year 1920–21, it is mentioned here.

OTHER CONFERENCES.

The bureau also cooperated in many important conferences, including the National Education Association, Special Committee on Highway Engineering Education, Highway and Highway Transport Committee, National Association of State Universities, Association of Colleges and Preparatory Schools of the Middle States and Maryland, Association of American Universities, Department of Superintendence, etc.

EDUCATIONAL CAMPAIGNS.

The specialist in rural school extension lectured before county institutes and school officers' associations in West Virginia, Ohio, South Dakota, Iowa, Texas, and Virginia, with the object of arousing a greater interest on the part of the people in the improvement of rural schools. He presented the bureau's program for better schools, and discussed the problems of a longer term; better qualified teachers; consolidation of schools; teacher placement; teachers'

homes; the school-owned demonstration farm as an illustration in better home-making and scientific farming; all-year sessions of schools; community organization and wider use of the school plant as a civic and social center; good roads as related to the improvement of country schools and country life, etc.

III. APPROPRIATIONS.

There is urgent need of much larger appropriations for the work of the bureau, notwithstanding the present program of economy in governmental expenditures. The reasons for this view may be summarized as follows:

1. The bureau has not had for some years past adequate appropriations to make it efficient.

2. The crisis in education is as acute as it is in business, and the need of reconstruction of our educational systems is imperative.

3. Our schools, especially the rural schools, which constitute more than two-thirds of the schools of the United States, can not be financed on the prewar basis. Many States can not solve the rural-school problem without assistance from the Federal bureau. There could be no greater calamity to the Nation than the breakdown of the rural schools.

4. The war has made some appalling revelations. Some of the outstanding things are: The illiteracy of practically 25 per cent of the population; the serious lack of attention to health, hygiene, and physical education; the urgent need for Americanizing our heterogeneous foreign elements. All of these are matters of national importance and need subsidies from the Federal Government.

5. The attempt to economize by small appropriations to the bureau has had the reverse effect and has been wasteful. Much of the work of the bureau is made void because of the inability to carry it to completion when funds fail. Many investigations are made and before funds are available to publish them are out of date. The bureau is so far behind in its collection of statistics that the value of the statistics is seriously impaired. I think that, in some instances, many times the amount saved in economizing on salaries is lost through maladministration. An example is in the administration of the gifts of the Federal Government to land-grant colleges. The Government gives annually to these institutions a sum of $3,509,225, but appropriates only $1,800 to pay the salary of the person who undertakes to see that the legal requirements are met by the respective institutions. The position is frequently vacant and has changed six times in 10 years. To save the difference between $1,800 and a salary that would hold an efficient man in this position we have inefficiently administered a sum of more than three and one-half millions of dollars annually.

I am of the opinion that the department should seriously consider the question as to the advisability of continuing the Bureau of Education on the present basis of wholly inadequate support. The need for a national governmental agency to perform the functions expected of this bureau is imperative and unquestioned. The efforts to meet the need, however, are largely nullified by the legislative restrictions and financial limitations by which the bureau is at present handicapped. In my judgment, it would be better for the Fed-

eral Government to withdraw from this field of activity entirely unless provision is to be made for it on a more liberal basis, and the policy definitely adopted of attempting to render in an effective and authoritative way the kinds of constructive service which the people and the educators themselves demand. It is futile to continue this organization on the present penurious basis and to expect returns that will justify the outlay.

IV. RECOMMENDATIONS.

(1) *Rural education.*—Although much effort is being put forth for the improvement of rural schools, they still constitute the most unsatisfactory part of our public-school system. Many of the States are being aroused to a new realization of the consequences of further neglect of the education of young people on the farms and in the smaller villages. State and county educational authorities are constantly appealing to the Federal Bureau of Education for guidance, suggestions, and leadership in the improvement of rural schools.

There is urgent need of authoritative studies of the organization, administration, and financial support of rural schools, courses of study, methods of teaching, and adaptation of the work of the schools to the life and needs of the communities which they serve. The reports of these studies should interpret to taxpayers and legislators as well as to teachers and other school officers the plans and methods which now seem to be most effective and economical, and should constantly hold up such standards and ideals as are reasonably attainable.

To do this work the bureau should have an increase in the staff assigned to it, and it should be possible to offer salaries which will attract and hold the most capable men and women in this field.

For extension work in rural communities and among school officials the bureau should be in position to offer more extensive service with motion pictures, slides and lectures, to assist in promoting consolidation of school districts, improvement in buildings, grounds, equipment, and methods of instruction and supervision.

For cooperative experiments in rural education the bureau should make arrangements with two rural school districts—a one-teacher school and a consolidated school—for the conduct of a series of experiments in connection with courses of study, methods of instruction, classification of pupils, daily programs, etc.

(2) *Industrial education.*—The following studies in the general field of industrial education are of immediate and vital significance to public education. Because of the stimulus of Federal aid to vocational education carried on in certain special schools and classes the work of the entire school system is profoundly influenced. Superintendents and principals are experimenting in all directions and are constantly appealing to this bureau for guidance and suggestion. Much time, energy, and money can be saved to the school systems of the country by the results of these studies made by capable experts in the form of authoritative recommendations and definite, constructive suggestions. The studies proposed all lie entirely outside of the field of effort of the Federal Board for Vocational Education as defined in the law:

(*a*) Special study of the technical high school and technical departments in cosmopolitan high schools with analysis of significant

factors in successful schools and recommendations for the guidance of superintendents, principals, and teachers; courses of instruction; programs of studies; qualifications of teachers; equipment, lay-out of shops and drafting rooms, costs, etc.; subsequent careers of students; various studies of student population, holding powers of school, etc.

(*b*) Special study of manual arts and prevocational work in junior high schools carried out along lines similar to (*a*) above.

(*c*) Special study of courses and methods of instruction for the preparation of teachers of manual training and prevocational work in these types of school.

(*d*) Special study of courses and methods of instruction, qualifications of teachers, and equipment needed in manual-arts work in the elementary schools, grades 1 to 6.

(*e*) Special study of plans and methods for vocational guidance in public elementary and high schools.

(*f*) Special study of provisions for manual arts, prevocational work, and vocational guidance in rural and village schools.

For the prosecution of these studies in industrial education, and to assist in educational surveys, and for corresponding extension of the services now rendered in home economics education and commercial education, additional specialists are needed as well as additional funds for the conduct of investigations in the field and the preparation and publication of reports.

(3) *Physical education and school hygiene.*—More adequate provision is needed for investigation and promotion of health teaching, school sanitation, and hygiene, and the physical education and development of children. Nearly 20,000,000 children spend a good part of the time each year in public and private schools. In many of these schools the heating, lighting, and ventilation, and other means of sanitation are so poor as to constitute a menace to health rather than a means of building up the health and strength of the pupils.

From State, county, and city school officers, from teachers and parents, in all parts of the country, thousands of requests come to the bureau for information and advice in regard to these matters. The bureau should be able to give accurate information and sound advice regarding the various phases of this subject.

The establishment of health and correct health habits and the best types of physical education must be considered most important and vital factors in any education that is to fit for life. It would be tremendously wasteful for every large city, and for all the 48 States, to conduct independently the research necessary to establish the principles and to formulate the constructive program demanded by public policy in these matters. Proper instruction in health and provision for such games, plays, drills, and other exercises as will develop physical strength, bodily control, and endurance are essential to the schools of any nation that would maintain for all its citizens a high degree of efficiency in discharging the duties both of peace and war.

(4) *Educational legislation.*—The demands for information and advice on educational legislation are constantly increasing, and long since passed the stage at which one person is sufficient for the work. No other agency in the country is in position to render the service sought by members and committees of State legislatures, boards of education, and other school officers. The volume and scope of edu-

cational legislation are constantly increasing, and the bureau should be equipped to study and interpret it authoritatively.

(5) *City school administration and public education.*—Substantial additions to the staff of the division of city school administration are needed for the investigation of problems of education and school administration in cities and towns. The drift of population to cities and towns continues. In some sections of the country a very large proportion of the children in the schools are the children of foreign-born parents. This adds to the complexity and difficulty of the problems of city school administration, especially in the larger cities.

Requests come to the bureau in increasing number for assistance in dealing with these problems. Within the last few years requests have come from scores of cities for comprehensive educational surveys, and many other cities have appealed to other agencies for help of this kind because it was known that the bureau is not equipped as it should be to do this work. No other agency can render so effectively unbiased, authoritative service as the Federal Government.

In addition the bureau should be equipped to investigate and report on special problems of secondary education in city schools, including especially the organization and administration of junior high schools: to make a special study of science teaching in city schools; to investigate and report on the best means and methods of educating boys and girls for citizenship, and to give advice to superintendents, principals, and to teachers regarding elementary and high-school courses of study in civic education; to investigate and report on the various means and methods which have been proposed for testing the performance of children or measuring the results of class-room instruction.

(6) *Kindergarten education.*—The rapid development of the kindergarten in public education has led to a substantial increase in the demand upon the bureau for help in interpreting this movement and for constructive suggestions relating to the establishment of these facilities and their proper coordination with the remainder of the public-school system.

(7) *Higher education.*—There is great need for the establishment of a division of higher education, including education in colleges, universities, technological schools, normal schools, and other professional institutions of higher learning. The constant and increasing demands from these schools for the help of the bureau in making surveys and for advice as to their reorganization to meet rapidly changing conditions and new conceptions on the part of the people as to the mission of higher education are far more numerous than the bureau can meet with its present force. No other agency can render the disinterested service that is asked for.

(8) *Visual education.*—The educational possibilities of the motion picture constitute an immense field of the utmost significance as yet practically unexplored. Although there are now more motion-picture machines in schools, churches, clubs, etc., than in commercial theaters, conditions are such that the industry is organized almost exclusively to serve the interests of the commercial theater.

The demand from educational institutions may never equal in bulk or in steady continuity the commercial demand, and yet its potential strength is sufficient to attract attention if only it can be

organized and given expression. Representatives of the larger producers have declared their willingness to produce the films, provided they can be assisted in determining what is needed and can be used in the schools, and they have appealed to the bureau repeatedly to take the initiative in organizing some plan of investigation. No producer or organization of producers can afford to make the necessary analysis of school needs and educational possibilities, and they all lack the motive, the personnel, and the school contacts which are essential to the success of such a study.

In addition much help is needed in studying the use of the stereopticon and stereopticon slides, the stereoscope, the phonograph, and other aids to instruction, to determine how much time may be used in these ways, what are the most effective and economical methods, the sources and cost of such instructional materials, and the needed equipment.

(9) *Americanization and eradication of illiteracy.*—The bureau should be permitted to organize at once a division of Americanization and education of illiterates. We were all startled by the revelations during the war as to the extent to which the safety and solidarity of our Nation are threatened by the inability of large sections of our population to understand our language, and by the prevailing ignorance of the elementary principles upon which our form of government is based and of the ideals toward which we are striving. The several States are studying these problems, but there is urgent need of a central agency which can make immediately available to all the results of any experiment which proves successful, and which can supply the constant stimulus to better things which can come only from effective leadership. This is obviously a function of the Federal Government.

(10) *School finance and accounting.*—In no way could the bureau render a greater service to the cause of education in the country than by an organized effort to promote better methods of school financing and accounting. Experience which the bureau has already gained in the surveys made of State and city school systems and of individual institutions demonstrates the need for constructive help along this line. A few thousand dollars spent in developing efficient systems of accounting, and in aiding school authorities to install and administer them, will save the taxpayers many times the sum thus expended.

There are at least four major groups of problems in school finance and accounting, and the bureau should be equipped with experts capable of doing constructive work in each:

(*a*) Methods of accounting used in State departments of public instruction; relation of school expenditures to the total State budget; use of Federal and State subsidies for specified activities; accounts with permanent schools funds, and other investments; use of State distributive funds for specified objects; sinking funds; possible economies due to more efficient accounting; special problems of rural school finance and accounting.

(*b*) Methods of accounting used in colleges, universities, normal schools, and other institutions of higher learning; use of budget system; analysis of sources of support; methods of determining per capita costs of various types of higher education.

(*c*) Methods of accounting used in municipal or district systems of schools; use of budget system; interpreting school costs to the taxpayer; sources of waste due to imperfect accounting; methods of determining actual costs of various educational activities.

(*d*) General problems of State and municipal systems of taxation and revenues, and their relation to school finance and the support of public education.

(11) *Assistant Commissioner of Education.*—The duties of his office make it necessary for the commissioner to visit distant parts of the country and to absent himself from the office frequently many days at a time. He is also a member of the Federal Board for Vocational Education and the duties of this position require much of his time. To act for him in his absence and to relieve him of many details of his office, an assistant commissioner should be provided. Under existing legislation,[1] the duties of the commissioner, in his absence, devolve upon the chief clerk of the bureau, who receives a salary of only $2,000. The salary of the chief clerk should be raised to $3,500 or $3,000. Some of those responsible to him receive these latter amounts.

(12) *Specialist in foreign educational systems.*—It is absolutely necessary for the bureau to have on its staff a well-trained man who can keep the bureau and the people of the United States informed as to all important progress in education and in methods of teaching in all countries of the world. The salary should be not less than $3,500.

(13) *Draftsman.*—A skilled draftsman is needed for aiding in the Statistical Division and in the Editorial Division, to assist in the preparation of graphs for the purpose of making the various bulletins issued by the bureau more serviceable and intelligible to the public.

(14) *Clerks.*—A substantial increase in the number of clerks is needed for service in the several divisions of the bureau, especially in the research divisions, which are now sadly handicapped on account of lack of clerical assistance.

(15) *Traveling expenses.*—A comparatively large increase in the appropriation for traveling expenses is necessary to enable the specialists in the bureau to make necessary investigations in the field, to attend and address meetings of educational and kindred associations and to give information and advice when requested to legislative bodies and committees and school officers. Very little work of this kind can be done with the present appropriation.

(16) *Library.*—A small increase is requested in the appropriation for the purchase of educational periodicals, which is necessary because of increases in subscription costs. The amount now appropriated is no longer sufficient to buy the periodicals needed.

(17) *Collecting statistics.*—An increase is needed in the appropriation for this purpose to enable the chief of the Division of Statistics to visit State and city departments of education for the purpose of securing accurate statistical data and of securing greater uniformity in such statistics.

(18) *Increases in salaries.*—Increases in salaries paid to a number of employees of the bureau are imperatively needed. The greatest injustice in this respect is the case of the chief clerk, already cited.

[1] R. S., secs. 178–180, 2d ed., p. 28. (July 23, 1868.)

The duties of these positions require the services of men and women of such native ability, education, and experience as would enable them to demand much larger salaries elsewhere. The limit of salaries that may be paid from lump-sum appropriations should be removed, and such increases in amounts of these appropriations should be provided as will enable the bureau to employ a number of specialists fitted by ability, training, and experience to do the work for which these appropriations are made. Under the present conditions this is wholly impossible.

(19) *Publications.*—For printing the reports, bulletins, circulars, and journals which should issue from the bureau each year, there should be available a much larger sum than that now allotted for this purpose. The growing importance of education in our national life, the large expenditures for schools and other agencies of education, the increasing extension and differentiation of education to meet the new and increasing needs of industrial and civic life have created a demand for such information as is contained in these publications in many and widely varied fields of education. This requires the printing of a larger number of bulletins each year, and many of these should be printed in much larger editions than is now permitted by law. The present limit of 12,500 copies of a bulletin is wholly inadequate to furnish copies of many publications which are of immediate interest to the entire country. The law should be so amended as to permit issuing bulletins in such numbers as in the judgment of the Secretary of the Interior may be needed.

(20) *Activities in Alaska.*—Substantial increases in appropriations should be made available, which will permit the extension of educational activities, the introduction of the reindeer industry, and other facilities which will promote improvement in the economic and social conditions in extensive regions in which no such service is now rendered.

(21) An increase of $37,180 over the amount appropriated for 1922 is recommended to cover the net cost of equipping and operating the U. S. S. *Boxer*, a wooden ship which has recently been transferred from the Navy Department to the Department of the Interior for the Alaskan service.

(22) There should be established at White Mountain, on Seward Peninsula, a sanitarium for tubercular patients, at a cost of $30,000. At each of the five hospitals now in operation there should be erected a cabin for use by tubercular patients, at a total cost of $5,000.

Respectfully submitted.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1922

WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.
Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL.D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 1, 1922.

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1922, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

GENERAL ACTIVITIES OF THE BUREAU.

ORGANIZATION AND FUNCTIONS.

The act creating the United States Bureau of Education defines its purposes and duties as those of collecting such statistics and facts as will show the condition and progress of education in the several States and Territories and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country.

This statement of the functions of the bureau makes it primarily an institution for scientific research and gives it no administrative duties. Such administrative duties as it has have been subsequently assigned to it. Broadly stated, then, the functions of the bureau are as follows:

(1) To be informed on all subjects pertaining to education.
(2) To disseminate such information.
(3) To promote the cause of education generally.

In my last report I outlined the form of organization of the bureau for the discharge of these functions. This organization, based on a careful analysis of the activities carried on, provides for two departments, with divisions as follows:

(1) Technical activities, under the direction of the assistant to the commissioner: (*a*) Higher education; (*b*) rural schools; (*c*) city schools; (*d*) service, comprising school hygiene and physical education, industrial education, home economics, commercial education, educational legislation, and foreign education.

(2) General service activities, under the direction of the chief clerk: (*a*) Editorial; (*b*) library; (*c*) statistics; (*d*) education, medical relief, and reindeer service for natives of Alaska; (*e*) stenographic; (*f*) mails and files; (*g*) messenger service.

The plan of organization has been effective even beyond expectations. The correlation of effort in the bureau under a unified plan has worked well in each of the divisions established and has, in my opinion, significantly increased the general efficiency of the bureau as a whole. The plan of bringing the various divisions together from time to time in conference, and particularly the technical staff, has

been especially helpful and has brought about a better understanding of the mutual efforts of those working in the bureau, and a consequent increase in morale which has been evident to me, particularly during the last few months.

The importance of the work in school hygiene and physical education has justified the employment of an additional specialist and an additional clerk. Because of this increase in personnel and the resultant extension of activities in this field, I have determined to take this work out of the Service Division and create a new division of physical education and school hygiene at the beginning of the new fiscal year.

During the past few months I have deemed it expedient, for administrative reasons, to place the work in statistics temporarily under the supervision of the chief of the city schools division.

The year's experience has not developed any suggestion for further modification of the administrative organization, and it will therefore continue for the present substantially as it was originally set up.

Technical Activities.

EDUCATIONAL RESEARCH AND PROMOTION.

The specialists attached to the four research divisions of the bureau constituting the technical staff have held a number of conferences with the commissioner during the year for the purpose of discussing bureau plans and policies and methods of making our service to the country more effective. Conceiving the bureau as primarily an agency for service to educators and the general public, we have endeavored to function specifically in the following ways: (1) Field service, (2) research and investigation of special educational problems, (3) dissemination of information, and (4) educational surveys.

(1) Service in the Field.

The bureau has always been seriously handicapped in its efforts to render field service in stimulating and promoting the cause of education by lack of funds for travel. State departments of education, county and city educational authorities, and educational institutions and associations of all kinds appeal to the bureau for guidance and assistance of a type which they maintain can be rendered only by a Federal agency. The limitations upon the ability of the bureau to send its representatives away from Washington have compelled the adoption of a policy of rendering service where there is the ability to pay the incidental cost of travel rather than in those sections or communities where the greatest need exists.

Service rendered in the field by representatives of the bureau takes the following forms: Lectures and addresses upon educational topics before audiences of teachers, students, women's clubs, business men's clubs, and the like; conducting and assisting in special conferences for the consideration of educational problems; attendance upon educational conventions; visiting schools and conferring with school officers and teachers for the purpose of securing information; participation in educational surveys (referred to hereafter).

Some of this field work is undertaken upon the initiative of the bureau, in order to secure needed information and in order to keep

abreast of current developments. Most of it, however, is done at the request of the school authorities in the several States. Summarizing all types of field service together, I may report that during the fiscal year 26 members of the bureau staff, exclusive of the Commissioner, rendered an aggregate of 1,090 days of field service outside of the District of Columbia in 41 different States; in addition, 23 days in visiting schools in Europe, 32 days in Hawaii, and one day in Canada. (Vide fig. 1.)

As one feature of this service, 18 members of the staff, exclusive of the Commissioner, delivered 257 public addresses, in 34 different States, to audiences aggregating 70,000 persons.

(2) Research and Investigation.

In its endeavor to discharge the function of a clearing house of information the bureau is at all times engaged upon the systematic study of a variety of current problems. The staff of the bureau available for technical study of this kind is so limited that it is impossible to give serious attention to more than a fraction of the perplexing questions upon which school authorities seek advice. The daily correspondence of the bureau makes heavy demands upon the time of those whom we should be permitted to assign to continuous research. Further inroads on the available time of members of the technical staff are due to assignments to educational survey work in the field.

In view of these handicaps, we call attention with some pride to the extent and variety of the research work accomplished during the year. The types of study upon which the bureau has been engaged are best suggested by the titles of the publications issued, as given in the following paragraphs, and in the report of the editorial division, pages 20–24.

(3) Dissemination of Information.

For many years the chief contribution of the bureau, in the way of publications, was the commissioner's annual report. Beginning about 1906 the policy was adopted of publishing a series of bulletins or monographs on various phases of education. The manuscripts of many of these were contributed by educators outside the bureau, but as the membership of the staff increased in number these publications have represented the work of the bureau in increasing proportions.

I find that many of these monographs, contributed by bureau specialists and by others, have been important contributions to the literature of education, and have exerted measurable influence on the development of school practice. This influence has never been as great as it might, because of certain practical limitations in the matter of printing and distribution.

Although there are upwards of 800,000 school-teachers and officers in the United States, the bureau is limited by law to editions of 12,500 copies of its bulletins. Salaries paid to school-teachers do not encourage investment in books and other needed helps; consequently the larger and more expensive bulletins reach only a relatively small number among the teachers.

For this reason, and also because of the limited amount of funds available for printing and the delays incident to getting the larger

manuscripts through the Government Printing Office, the bureau has in recent years reduced the number of more extensive treatises, and materially increased the number and proportion of briefer papers. These now take the form of circulars or leaflets of from 8 to

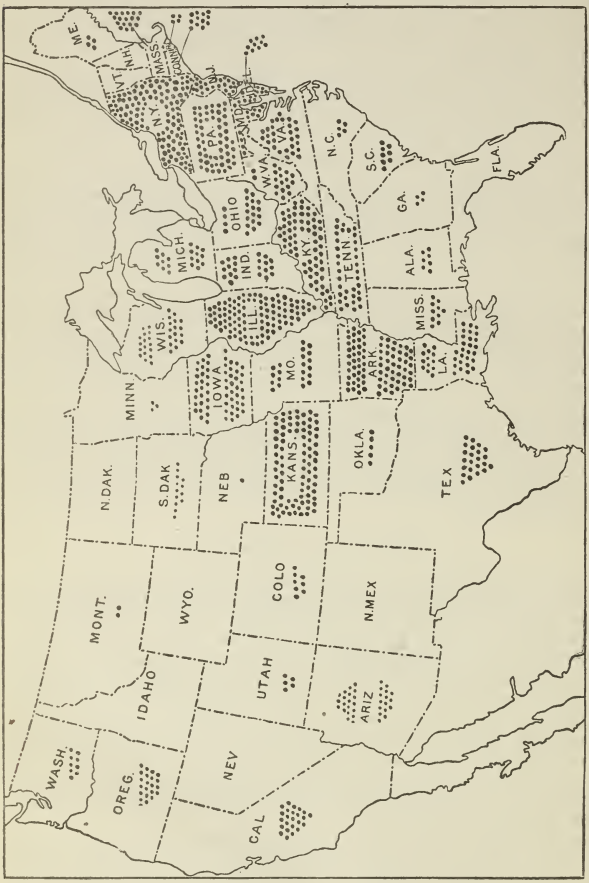


FIGURE 1.—Map showing the States in which the Bureau of Education performed field service of some kind during the fiscal year 1921–22. During this year 26 members of the staff, exclusive of the commissioner, rendered an aggregate of 1,146 days of field service (including Sundays and time spent in travel pro-rated) in 41 States, Canada, Hawaii, and several countries in Europe. Each dot represents one day of service.

32 pages, containing digests of the proceedings of important educational conferences conducted by the bureau, abstracts of the conclusions and recommendations of educational survey commissions, condensed reports of studies made in the bureau, and the like.

(4) Educational Surveys.

One of the most important types of service rendered by the bureau, and probably most far-reaching in effect, is in its conduct of educational surveys. Shortly after I took office I caused a summary to be made of the activities of the bureau in this matter, and found that an aggregate of 156 surveys have been made by it, in 42 States and the

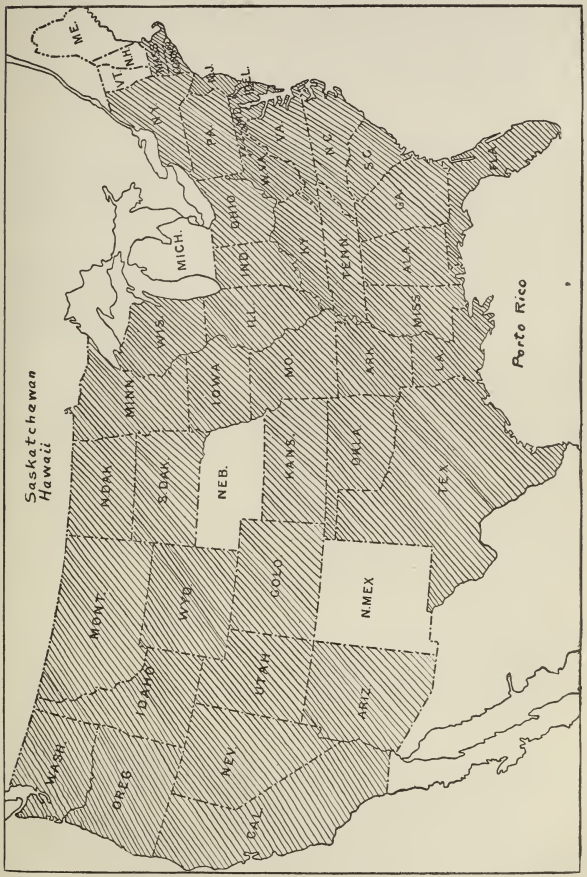


Figure 2.—Map showing the States in which the Bureau of Education has made educational surveys. Since it was established, in 1867, the bureau has made 156 surveys, in 42 States, the District of Columbia, Canada, Hawaii, and Porto Rico.

District of Columbia, also Hawaii, Porto Rico, and one of the Provinces of Canada. These surveys may be classified as follows:

(*a*) State public-school systems	9
(*b*) State systems for higher education	7
(*c*) Higher educational institutions	88
(*d*) Public school systems of cities	17
(*e*) School buildings in cities	10
(*f*) Public-school systems of counties	9
(*g*) Negro education in the United States (26 States and District of Columbia)	1
(*h*) Unclassified	15
Total	156

The earliest of these was a survey of public education in the District of Columbia, made by Dr. Henry Barnard, the first Commissioner of Education, in accordance with a joint congressional resolution approved March 29, 1867, the same month in which the bureau was established. The findings were published in a special report of 912 pages, June, 1870.

Some of these surveys have been comprehensive studies, requiring the services of staffs of 20 or more experts for periods of field work varying from four to eight weeks. At the other extreme, surveys of individual institutions have been made by a single representative of the bureau in one or two days, which perhaps would be more appropriately designated as inspections.

During the fiscal year 1921–22 the following surveys were made:

(*a*) State system of public schools, Arkansas	1
(*b*) State system of higher education, Kansas	1
(*c*) Higher educational institutions	31
Arkansas, 13 colleges and universities.	
Arizona, State University.	
Oregon, 12 colleges and universities.	
Tennessee, 4 colleges.	
State College for Women, Greensboro, N. C.	
(*d*) Public school systems of cities	4
Trenton, N. J. (administration).	
Washington. D. C. (administration).	
Shreveport. La.	
Sparta, Wis.	
(*e*) School buildings in cities	3
Parkersburg, W. Va.	
Washington, N. C.	
Greenfield, Ohio.	
(*f*) County system of public schools	1
Washington County. Va.	
Total	41

The surveys made during the past fiscal year are therefore almost a third of the total number of surveys made by the bureau in the 54 years of its previous existence. (Vide fig. 3.)

In most instances the recommendations of the surveys have resulted in substantial improvements in the educational conditions and practice of the school system involved, and in no instances have the recommendations been without some practical effect.

Activities of Divisions.

In addition to the foregoing general statements, the activities of the several research divisions may be summarized as follows:

RURAL SCHOOLS DIVISION.

The work of the year has been devoted largely to offering practical assistance to rural school superintendents and supervisors.

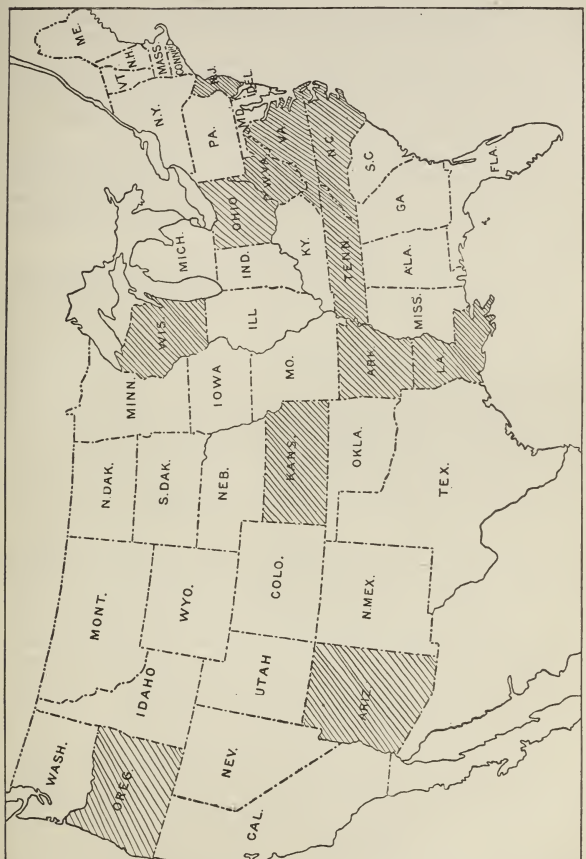


FIGURE 3.—Map showing the States in which the Bureau of Education has made educational surveys during the fiscal year 1921–22. During the year the bureau made 41 surveys, in 12 States and the District of Columbia.

Through these officers the division establishes relations also with school patrons and teachers in rural communities.

Three current movements in rural education are of fundamental importance: (1) Consolidation of small, inefficient schools into larger

ones offering increased facilities, and usually high-school opportunities; (2) employment of professionally trained supervisors, to aid in improving the work of teachers in the service; (3) improvement of one-teacher schools when consolidation is not practicable.

In the promotion of these larger movements the division has in progress a comprehensive study of rural school consolidation in the 48 States. A report on the present status of rural school supervision, including statutory and administrative provisions, as well as descriptions of successful plans and methods, is now in press. The importance of the movement to furnish adequate and comfortable living quarters for rural teachers has been recognized by the publication of a bulletin on Teachers' Homes.

Other studies in progress include: Plans for standardizing rural schools in the 48 States; objectives in agriculture in rural elementary schools; suggestions concerning organization of parent-teacher associations in rural communities; suitable programs for the meetings of such organizations; games for rural schools.

The division has prepared and assisted in circulating among rural school officers and others on request 25,070 leaflets and 20,300 circulars on the following subjects:

Consolidation and rural life.
Transportation of rural pupils at public expense.
Modern equipment for a one-room school.
Consolidation of rural schools in Maine and Connecticut.
A rural teacher's library.
What is a consolidated rural school?
A digest of State laws on transportation of pupils.
Consolidation of schools and transportation of pupils.
Salaries of teachers in rural schools in 1922.
Salaries of superintendents and supervisors.
Abstract of report of committee on resolutions, department of rural education, National Education Association, Chicago, March 2, 1922.
Projects in rural supervision.

During the year members of the division have visited 22 different States for the purpose of investigating school conditions, holding or attending conferences on rural education, making addresses at educational meetings, and assisting in educational surveys. The chief of the division spent five weeks directing the rural school portion of the Arkansas State educational survey. With the assistance of four rural school specialists from outside the bureau, schools were visited in 20 counties. Another member of the division had charge of compiling the statistical data for the survey report.

At the request of the State department of education a survey was made of school conditions in Washington County, Va.

Rural life conferences were organized by members of the division in Missouri, Kansas, Oklahoma, Iowa, and Illinois. One member of the staff spent five days assisting the State superintendent of public instruction of Kentucky in a campaign for better schools and a drive for school legislation.

Under the direction of the division, two motion-picture films were prepared, one showing methods of supervision, the other showing rural school consolidation and its results in the United States. Stereopticon slides for general circulation among school authorities have been prepared as follows: Twelve sets on school consolidation in the United States; 6 sets on transportation of school children; 6 sets on rural school activities; 3 sets on rural schools and grounds.

Much of the general correspondence of the division requires special investigation. Examples of material prepared on request of State educational authorities and others include: Definitions of consolidated school as used in the different States; list of normal schools and colleges offering special courses for preparation of rural teachers; outline of teaching methods for making rural surveys for use in summer courses in normal schools.

A revised mailing list was compiled containing more than 300 rural school supervisors and professors of rural education in normal schools and colleges. One member of the division was in charge of the preparation of the educational exhibit of the United States at the Brazilian International Centennial Exposition; another member collected and distributed information regarding educational opportunities for ex-service men; also considerable preliminary work was done on tabulating data for the Oklahoma State educational survey.

HIGHER EDUCATION DIVISION.

Surveys were made of four institutions of higher learning in Tennessee, and the resulting recommendations were immediately adopted and have been carried into effect. A survey was made of the North Carolina State College for Women and suggestions offered which have led to a reorganization of the internal administration on a more effective basis. In Oregon, where the State law requires colleges and universities to be accredited by the United States Bureau of Education, the bureau's specialist in higher education inspected twelve colleges and universities for the State department of public instruction and reported a revised list of accredited institutions.

More extended surveys of State institutions of higher learning were made in Arkansas, Arizona, and Kansas. In September, 1921, the report of the bureau's commission on the University of Arkansas was submitted to the governor and a committee of the State legislature. As a result of this report some changes have been made in the administration of the university. Certain other important recommendations await the action of the next legislature. Later a survey was made of the Arkansas State Normal School.

Under the direction of the specialist in higher education, a survey was made of the State system of higher education in Kansas by a commision including President L. D. Coffman, of the University of Minnesota; Dean A. R. Mann, of Cornell University; and J. D. Christenson, of the University of Michigan. It is expected that the report on the survey will be made about September 1, 1922.

A survey of the University of Arizona was conducted by President P. R. Kolbe, of Akron University, and Lloyd E. Blauch, the bureau's specialist in charge of land-grant college statistics. On account of a vacancy in the presidency of the university no action on the recommendations in the report has yet been taken.

The specialist in rural and technical education, in cooperation with the committee on highway and highway transport education, held a number of State conferences for the promotion of education in these fields. Of special importance were those held in Kentucky, Texas, Pennsylvania, Tennessee, Maryland, and Connecticut. Reports of the proceedings of these conferences have been published by the

bureau and by other agencies. Plans are now under way for a second national conference on highway education to be held in Washington in October, 1922.

The specialist in rural and technical education was also responsible for holding a conference at Nashville, Tenn., on negro land-grant college education, with special reference to standards in agriculture and home economics, in cooperation with the Federal Board for Vocational Education and the United States Department of Agriculture.

In addition to the bulletins and pamphlets listed under the report of the editorial division, the division of higher education has prepared circulars on the following subjects: Comparison of enrollment and endowment at 200 leading American colleges and universities; classification of student enrollment and distribution of teachers in engineering schools; current statistics on incomes, salaries, and enrollment at State universities and colleges. The following manuscripts are either completed or are nearing completion: Statistics of land-grant colleges for 1919–20 and 1920–21; decennial report on land-grant college education; report on survey of the University of Arizona; report on survey of higher education in Kansas; residence of students in higher institutions, 1920–21; the educational contribution of Hampton Institute as a land-grant college.

The schedule used in collecting data from land-grant colleges has been revised for use hereafter in collecting data from all publicly supported institutions. Addresses were delivered at the following educational meetings: Association of American Colleges; Junior College Association; Land Grant College Association; Texas State Teachers' Association; Texas State Association of Colleges; Arkansas State Teachers' Association; Kansas State Schoolmen's Club; Educational Conference of the Southern Baptist Church; South Carolina State Citizens' Conference; North Carolina Presidents of Colleges and Universities; George Washington University Faculty Club; Colleges in Tennessee, Oregon, Maryland, North Carolina, and Virginia; Conference on Negro Education in Land Grant Colleges; Interstate Conference on Education; Society for Promotion of Engineering Education; conferences on highway education in Texas, Tennessee, and Maryland.

CITY SCHOOLS DIVISION.

During the year manuscripts were prepared by the division of city schools on the following subjects: Administration of schools in the smaller cities; titles of positions in the administrative staffs of schools in cities of more than 25,000 population, with the salary attached to each position; salaries of elementary and junior high-school principals and teachers in 1,444 cities; salaries of teachers in cities of 100,000 population and over, published in report of hearing on Senate bill 3136; data regarding certain phases of school administration in smaller cities; salaries of high-school teachers; reports regarding the work-study-play or platoon school.

A survey of the public schools of Sparta, Wis., was made at the request of the board of education, to determine school building needs and to point ways of improving the school system. The recommendations of the surveys were adopted by majority vote of the citizens of Sparta.

A study of the plan of administrative organization of the public schools of Trenton, N. J., was made for the board of education of that city.

A general survey was made of the public schools of Shreveport and Caddo Parish, La., under the direction of the chief of the division, assisted by C. A. Ives, of the Louisiana State Department of Education, and Dr. F. B. Dresslar and Dr. Thomas Alexander, of Peabody College for Teachers, Nashville, Tenn. The report, covering 200 typewritten pages, was submitted to the Caddo Parish board of education and later published in full in the daily papers of Shreveport. The State superintendent of public instruction reports that the survey will be helpful not only to Shreveport and Caddo Parish but to the entire State.

School building surveys.—The division has responded to many requests from boards of education for advice in planning school building campaigns, averaging one such survey every six or seven weeks for three years past. In 1922 three school building surveys were made—at Greenfield, Ohio, Washington, N. C., and Parkersburg, W. Va. Some additional time was spent in assisting the authorities in carrying out the recommendations of the survey made last year.

The work-study-play plan.—In February, 1922, a conference of city superintendents having schools organized on the work-study-play plan was held in Chicago, which was attended by superintendents from 47 cities in 19 States. Some of the points made by the speakers include: That the plan is popular with pupils, teachers, and patrons when given a fair trial; that the plan is adaptable to any type of city, industrial or suburban, large or small; that this type of organization makes it possible for each school system and each school to have an individuality of its own; that the plan brings about an increase in the capacity of a building varying from 25 to 50 per cent; that the academic work does not suffer, but improves under the plan.

Replies to a questionnaire sent to the 41 cities in which schools are now operated on the work-study-play plan were returned from 27 cities, and show that in these 27 cities there are 153,364 children enrolled in 172 schools of this type. As a result of the Chicago conference the bureau was requested by the city superintendents of schools to serve as a clearing house of information on this phase of school development.

One specialist in this division has been making a study of the project method of teaching and the preparation of a bulletin on "Major Projects in Elementary Schools." The material was collected largely from a study of a cotton mill village in South Carolina, and shows how all the activities of a commmunity may be brought into the various units of study in the schools. Another series of type studies was developed, using the great national highways as a basis. A bulletin on this subject for the use of classroom teachers is in preparation. In the course of this work the specialist in charge taught a class of fifth-grade children in one of the Washington schools one hour daily for three months. Other studies completed include: Requirements for promotion from kindergarten to first grade, and from first grade to second; relation of the intelligence quotient to ability in reading; relation of the course of study to ability in arithmetic; intelligence tests as applied to primary grades; primary-school equipment; recent movements in primary education.

KINDERGARTEN EDUCATION.

The mailing list of teachers and others interested in kindergarten education has been revised, and circulars have been prepared for distribution on the following subjects: The housing and equipment of kindergartens; books on the education of early childhood (revised); what they think of the kindergarten; curriculum for the kindergarten and primary grades. The project method in the kindergarten; status of the kindergarten movement in the United States. A circular of information was prepared for women's clubs and parent-teacher associations, outlining suggestions for programs for the discussion of kindergarten education. A leaflet on kindergarten legislation is in preparation, for use in those States in which such legislation is being considered.

Two sets of lantern slides illustrating kindergarten equipment and methods have been in constant circulation, eleven States being served during the year. In cooperation with the International Kindergarden Union, a motion-picture film is being prepared. Sixteen cities will each contribute one section of the film. Typical kindergarten activities will be shown in the units from the contributing cities, and the units will be coordinated by the bureau's specialists into one film, which will be available for general circulation.

The two specialists made 46 public addresses before various organizations; four conferences were held with kindergarten teachers in Philadelphia; 16 kindergarten training schools were visited in Connecticut, New York, New Jersey, Pennsylvania, Virginia, and the District of Columbia, as a basis for drafting constructive suggestions in regard to training courses.

One specialist was an official delegate to the Pan-Pacific Conference on Education held in Honolulu in August, 1921, attendance being made possible by the cooperation of the International Kindergarten Union and the Pan-Pacific Union in paying part of the expense. One specialist represented the bureau at the Pan-American Conference called by the League of Women Voters, and presided at the educational session.

RADIO SERVICE.

In June, 1922, the Commissioner of Education requested from the interdepartment advisory committee on Government radio broadcasting that the Bureau of Education be granted a radio service through broadcasting in Washington by radio telephony through one of the Government high-power stations. The request was based on the fact that (1) one of the most important audiences which the Bureau of Education has to reach is the general public, particularly parents and taxpayers, since public education can not progress any faster than the state of public opinion about education; and (2) that at the present time this audience has grown too vast; the need for continuous education too great; the necessity for disseminating information quickly too frequent to be met any longer by the long-delayed infrequent bulletin. It was pointed out that a new situation in education has arisen and a new method of meeting it must be found. And it is believed that radio furnishes such a method. It is cheaper than printing; it reaches its audience quicker; it reaches

the mass of people who will not read printed articles; it is more effective because it has the intimate contact between speaker and audience; and above all, it can be continuous in service. The only thing that educates the public is continuous education. Radio can be the means of such continuous education.

SERVICE DIVISION.

The organization of the technical staff includes, in addition to the divisions of rural schools, city school systems, and higher education, a number of miscellaneous specialists in divisions which serve definitely more than one of these fields. The service division includes specialists in school hygiene and physical education, industrial education, home economics, commercial education. educational legislation, and foreign education.

School hygiene and physical education.—The scope of work comprehended under this designation is very extensive, including the hygiene of schoolhouse construction and operation; the hygiene of instruction and school management; school health supervision (organization and administration); education of defective and handicapped children; health teaching; physical education. The bureau attempts to maintain a limited information service in each of these lines, and to maintain contacts and advisory relations with important organizations concerned with them.

To this end the bureau has continued active cooperative relations with the United States Interdepartmental Social Hygiene Board, the Public Health Service, the department of superintendence and the commission on secondary education of the National Education Association, the Child Health Organization, the American Red Cross, the National Child Health Council, the American Social Hygiene Association, the National Tuberculosis Association, the United States Chamber of Commerce, the American Physical Education Association, the American School Hygiene Association, the American Child Hygiene Association, and other important agencies.

Three important national conferences of teachers and others have been held with reference to health and physical education. In addition, the specialist in school hygiene was absent on leave without pay for 60 days, investigating instruction in hygiene in higher institutions for the American Social Hygiene Association.

In the field of health education the division has centered its efforts mainly on stimulation and encouragement of health teaching in the schools. One new pamphlet was published, "Suggestions for a program for health teaching in the elementary schools." This is probably the most valuable number in the health education series to date, and met with an immediate demand that exhausted the edition early in the year. Two additional manuscripts are ready for the press: "Milk and our school children," and "Organization of school health work."

The usefulness and popularity of the health education publications are evidenced by the publicity they have received and by the sales through the Superintendent of Documents. For example, three years after the pamphlet "Diet for the school child" was published an editorial in regard to it was printed in a San Francisco paper, with

the result that 216 requests for it came to the bureau in one mail. From one State department of education came a request for 90,000 copies of one pamphlet. More than 250,000 of a single health publication were sold during the year, and this bureau now holds the record for the largest number of copies of any Government publication sold within the same length of time.

A considerable amount of service was rendered in the field of schoolhouse construction and sanitation, the major part of which was performed by the part-time special agent stationed at Peabody College for Teachers, Nashville, Tenn. The office work included: (1) Answering miscellaneous inquiries in regard to schoolhouse construction and operation; (2) specific advice to school boards and architects in regard to plans for school buildings; (3) preparation of manuscripts for bulletins. Field service included: (1) Assisting in the bureau survey of the public schools of Shreveport, La.; (2) thirteen visits to towns and cities in Alabama, North Carolina, Tennessee, and Kentucky to assist school boards and architects in school-building plans.

A bulletin on "Recent State legislation for physical education" was revised and published. A preliminary report on present and prospective costs of physical education in the United States was prepared for the chairman of the House Committee on Education.

Industrial education.—The specialist in industrial education arranged the program and conducted a three-day conference on the preparation of teachers of manual arts and industrial education, held at the University of Michigan December 8–10, 1921, and four conferences of specialists in industrial education on the following general topics:

Kansas City, Mo., January 4, "Problems of organization in industrial education."
Milwaukee, Wis., January 11, "Public-school supervision of employed boys and girls."
Rochester, N. Y., April 5, "Measuring the student's progress in shopwork."
Cincinnati, Ohio, May 1, "Manual arts in the junior high school."

The aggregate attendance at the five conferences was 319 delegates, representing 27 States and the District of Columbia. Reports of the proceedings of similar conferences held during the preceding year were published, as follows:

Higher standards for teachers of industrial subjects.
Organization of instructional material in individual units.
The contributions of correspondence instruction methods to industrial education.
Helping the shop teacher through supervision.

Home economics.—The major project of the specialist in home economics this year has been home economics in junior and senior high schools. As a means of stimulating interest in improved methods and as a means of studying the most progressive school systems the specialist conducted a series of regional conferences of teachers and supervisors, as follows:

New York City, February 16, 17, and 18.
Chicago, Ill., March 3 and 4.
Spokane, Wash., April 4, 5, and 6.
Portland, Oreg., April 7 and 8.
San Francisco, Calif., April 12 and 13.
Los Angeles, Calif., April 21 and 22.

Logan, Utah, April 28.
Salt Lake City, Utah, April 29.
Denver, Colo., May 5 and 6.
Kansas City, Mo., May 12 and 13.
Boston, Mass., July 6.

The attendance at these conferences ranged from 40 to 220, and as a result upward of 1,200 teachers of home economics were reached directly. The specialist represented the bureau at the following educational conventions, and numerous addresses were delivered: Department of Superintendence, American Home Economics Association, Land Grant College Association, Country Life Association, biennial meeting of the National Federation of Women's Clubs, Child Health Conference, Pennsylvania State College Conference on Education for Women, Ohio Home Economics Association, Maryland Home Economics Association, Virginia State Farmers' Institute.

Home economics departments in 47 schools in 14 cities were visited; methods of teaching and types of equipment were observed; conferences with teachers and supervisors were held. Home economics departments in five State agricultural colleges and two State universities were visited.

Bulletins and circulars of information were prepared and published on the following topics:

Home economics in secondary schools.
Present status of home economics education.
Equipment and rooms for home economics departments.
State certification for home economics teachers.
Home economics courses for rural schools.

A complete list of institutions of higher education offering courses in home economics was prepared, also a list of city supervisors.

The investigation of home economics instruction showed that approximately 500,000 pupils are now studying this subject in 8,000 high schools, and that it is compulsory in about two-thirds of all the largest city school systems. Home economics is being introduced into about 600 new high schools each year, and departments are now maintained in more than 600 universities, colleges, and normal schools.

Commercial education.—In the United States production has been allowed to develop without regard to marketing processes, both for domestic and foreign trade. More direct and more effective methods of distribution must be developed, but these require closer coordination of schools of commerce and engineering. When the bureau began work upon this problem several years ago engineering schools generally recognized in their curricula only about three units in business subjects and economics. At the present time 29 out of 129 engineering schools permit from 3 to 30 units to be taken in this field. The schools of commerce have been even slower to act, but they are now beginning to permit electives in engineering subjects.

Another important project is training for foreign service. The bureau called the first public conference on this subject in December, 1915, and at that time there were no schools in the United States offering instruction in preparation for foreign service, either for Government service or for commerce. At the present time 70 institutions offer some kind of training for foreign serivce, and this development is more or less attributable to the activities of the bureau.

The specialist in commercial education conducted 10 regional conferences, the chief results of which have been an increasing number of colleges and universities allowing entrance credits in commercial subjects and the accumulation of data for use in formulating courses of study for the several regions. This department maintains cooperative relations with the United States Chamber of Commerce, National Foregin Trade Council, Association of Collegiate Schools of Business, National Commercial Teachers' Federation, National Federation of Business and Professional Womens' Clubs, and other agencies. Six circulars on commercial education were issued, and a bulletin on "Training for foreign service."

Educational legislation.—As a means of giving information and assistance in the promotion of efficient school systems throughout the country, the bureau, through its school-law section, collects and compiles the school laws of the several States, particularly those of recent enactment, and publishes material relative thereto. The school-law work of the bureau falls into five divisions: (1) Circulars of information relative to the progress of educational measures through legislatures; (2) formal digests, or summaries, of educational enactments after their official publication in volumes of acts or session laws; (3) periodic interpretative reviews of legislation; (4) special studies involving school laws; (5) correspondence and personal conferences in which information, advice, and assistance are given.

Within the past year the specialist in school legislation made a digest of the enactments of the 42 legislatures in regular session in 1921 and of several special sessions; these digests were combined with those of the calendar year 1920, and at the close of the fiscal year were in process of publication as a bulletin of about 250 pages. While legislatures were in session in the winter and spring of 1922, several "legislative circulars" were issued. Within the year a number of brief special studies were made, and a more intensive study of the system of educational administration and the plan of school support of the State of Oklahoma was completed.

A considerable part of the time of the specialist in school legislation is devoted to the correspondence of the bureau which involves school law and to giving legal assistance to other specialists in the office. On several occasions specific assistance has been rendered in formulating State legislation, and some organizations of national scope which are interested in education have been assisted in collecting their data and organizing their efforts for school improvement.

Foreign educational systems.—The present personnel consists of one specialist in foreign educational systems, two full-time translators, and one part-time translator. For the efficiency of the service there is urgent need of an additional translator to cover the languages of important nations not now represented.

The function of the division is to serve as an agency of accurate educational information of all countries outside of the United States; to note educational movements and record progress; to give accurate account of the nature and operation of the principal school systems of the world; to organize, interpret, and evaluate this material in the light of the educational system of the United States; to diffuse this knowledge among the educators of the country through correspondence, lectures, conferences, and published reports.

During the year attention has been centered upon the following problems:

(1) Evaluation of elementary and secondary school credits from abroad in terms of corresponding credits from schools in the United States.

(2) Requirements and opportunities for the exchange of students, teachers, and professors.

(3) The essential ascertainable facts concerning conditions in the present reorganized school systems of all foreign countries.

(4) Sources, amount, uses, and form of distribution of school revenues in the more important foreign countries.

(5) The status, rank, preparation, qualifications, and salaries of teachers in foreign countries.

(6) Continuation schools in foreign countries, including provisions made for adult education, and the results.

(7) Physical education and child welfare in the schools of foreign countries.

Many inquiries have been received for information on the first of these topics. There are at present at least 10,000 foreign students in our institutions of higher learning, and probably as many more in secondary schools. This interchange of students is a desirable practice, making for permanent peace and international comity, and is encouraged by every progressive nation. It throws, however, an extra burden on educators and school officers of every country concerned. It is extremely difficult to classify and adjust these foreign students to the new system in order that they may accomplish the best results.

Under existing conditions students coming from the same institution abroad have received differences of three years in the ratings allowed by different institutions in the United States. The bureau is gathering data on this subject, and will in time be in position to render valuable service.

General Service Activities.

STATISTICS.

During the past year the statistical section has completed the following reports covering the school year ended June, 1920: (1) Statistics of private high schools and academies; (2) statistics of private business and commercial schools; (3) statistics of teachers' colleges and normal schools; (4) statistics of universities, colleges, and professional schools; (5) statistics of public and private kindergartens; (6) statistics of city school systems; (7) statistics of State school systems.

In the summer of 1921 a large section of the Educational Directory was prepared, including officials in State departments of education, county and city superintendents of schools, presidents of colleges, universities, professional schools and normal schools, and directors of summer schools.

Statistics of public high schools were recorded on punched cards ready for tabulation. The chapter on public high schools, with the graphic and explanatory material of the statistical chapters men-

tioned above, will complete the statistical chapters prepared for the Biennial Survey of Education, 1918–1920.

During the year some changes were made in the blanks for collecting statistics of city school systems and of public universities, colleges, and professional schools. A questionnaire was prepared and circulated for the American Classical League regarding the study of foreign languages in secondary schools. Replies to this questionnaire and reports of public high schools are now being edited.

Up to the present time it has been necessary for the bureau to depend entirely upon the questionnaire method for the collection of statistics. Experience has shown that as school systems and educational institutions have become more complex in their organization it is more and more difficult to secure accurate and complete statistical reports. The bureau should have a number of field agents who could be sent to State departments of education, city superintendents of schools, and to heads of educational institutions for the purpose of securing the necessary statistics.

EDITORIAL DIVISION.

Increased supply of paper during the fiscal year 1921–22 afforded relief in the printing situation and resulted in the delivery of several documents whose printing had been ordered months before. The longest delay was in the bound volumes of the Biennial Survey of Education for 1916–1918, the printing of which was suspended for more than a year. This suspension, however, was of less importance than the character of the document would seem to indicate, because the several chapters had been issued long before in the form of "advanced sheets." All the information had thus been given to the public, and the bound edition which suffered the serious delay was intended principally for permanent preservation in libraries.

Other documents, however, had been delayed nearly as much and a number of manuscripts of more than usual importance were held in the Bureau of Education because there was no possibility of action upon them. Among them were the papers that were intended to form the first volume of the Biennial Survey of Education for 1918–1920. A few of these were printed, but the delay which the others suffered was so long continued that it was finally decided to omit entirely the publication of this volume for 1918–1920. This decision did not, however, affect the statistical chapters, which form a separate volume.

Publications.—The plan of publication of the Bureau of Education includes (1) a biennial survey of education, comprising a complete statistical and textual résumé of educational conditions in the United States, with brief statements of the conditions in the principal foreign countries; (2) an annual report of the operations of the Bureau of Education; (3) bulletins or monographs usually containing comprehensive reports of educational research; (4) leaflets, comprising less extensive reports or discussion of educational movements or occurrences; (5) the periodical School Life, which contains information of important educational events or plans, reported as early as practicable. It describes the progress of education all over the world in brief and readable articles.

School Life.—The usual number of bulletins and leaflets were issued during 1921–22, but School Life, which had been published regularly since August 1, 1918, was suspended after the December, 1921, number. The congressional authority under which it had been printed expired at that time because of the failure of the Senate and the House to agree upon the same measure to govern periodicals issued by Government agencies.

The question was discussed from time to time on the floor of the House, and finally a joint resolution was adopted May 11, 1922, which renewed the authorization, but under very different conditions. Formerly 40,000 copies were printed for free distribution, but under the new law that number must be cut to 2,000. The result is the principal distribution must in future be by paid subscription. The price has been fixed by the Superintendent of Documents at 30 cents a year, but a reduction will be made to 25 cents if 25 copies are ordered to the same address. Ten numbers are issued each year, none being published in July and August. It is expected that the first number after the resumption of publication will be that of September, 1922.

Selection of manuscripts.—A marked change has been made in the method of selecting manuscripts for publication as documents of the Bureau of Education. In the past this duty was performed by the commissioner personally, after obtaining the advice of others whom he selected in each instance according to the character of the manuscript under consideration. This duty having grown to such extent as to be a burden on the commissioner, he has transferred it to a committee consisting of the chief clerk as chairman, the assistant to the commissioner, and the chief of the editorial division.

Distribution of publications.—Like all other Government bureaus, the Bureau of Education distributes its publications through the office of the Superintendent of Documents. During the year 1921–22 that officer mailed for this bureau 11,596 annual reports of the Commissioner of Education; 598,016 bulletins; 245,485 leaflets, circulars, and miscellaneous publications; 200,000 copies of School Life; and 5,000 copies of the annual index to that periodical. In all, 1,060,097 documents were distributed. In this statement the Biennial Survey of Education is classed as a bulletin. The letters handled by the editorial division during the year amounted to 42,580.

Allotment to divisions.—An experiment was made during this fiscal year of formally allotting the printing fund to the several divisions and purposes for which printing is required. A memorandum approved by the commissioner, dated October 18, 1921, assigned the following sums to the purposes named: Higher education, $5,000; rural schools, $6,000; city schools, $7,000; kindergarten, $500; industrial education, $1,000; home economics, $1,500; health education, $5,000; legislation, $2,000; library, $4,000; home education, $500; statistics, $11,735; bound volumes Biennial Survey, $6,563; School Life, $12,828; general documents, $7,874; miscellaneous, $2,000; total, $75,000.

Later in the fiscal year the allotment of funds for the printing of the Bureau of Education was reduced by the Secretary of the Interior to $65,000, and in the meantime the publication of School Life had been suspended. These events, together with other developments, necessitated a new allotment of the bureau's printing funds in Febru-

ary, 1922. The following table shows the expenditures for the several purposes stated:

Cost of printing for the purposes named, 1921–22.

	Work completed.	Unfinished at end of year.	Total ordered.
Higher education	$4,197.69	$1,363.95	$5,561.64
Rural schools	4,960.99	966.71	5,927.70
City schools	5,093.17	649.19	5,742.36
Kindergarten	687.37	0	687.37
Industrial education	342.72	44.83	387.55
Home economics	879.59	84.71	964.30
Health education	3,054.99	665.57	3,720.56
Commercial education	1,386.48	86.88	1,473.36
Legislation	1,297.54	546.60	1,844.14
Library	3,030.13	72.55	3,102.68
Home education	542.49	34.90	577.39
Statistics	8,252.51	314.36	8,566.87
Biennial survey	5,942.22	113.55	6,055.77
School Life	4,199.52	0	4,199.52
General	7,304.46	1,197.19	8,501.65
Miscellaneous	1,834.38	45.56	1,879.94
Total	53,006.25	6,186.55	59,192.80

List of Publications of the Bureau of Education July 1, 1921, to June 30, 1922.

BULLETINS 1919.

No. 88. Biennial Survey of Education, 1916–1918. Vol. 1.
No. 89. Biennial Survey of Education, 1916–1918. Vol. 2.
No. 90. Biennial Survey of Education, 1916–1918. Vol. 3.
No. 91. Biennial Survey of Education, 1916–1918. Vol. 4.

BULLETINS 1920.

No. 30. State laws relating to education, enacted in 1918–19. W. R. Hood.
No. 39. Opportunities for foreign students at colleges and universities in the United States. S. P. Capen.
No. 47. Proceedings of the fifth and sixth annual meetings of the National Council of Primary Education.
No. 48. Statistics of State universities and State colleges for the year ended June 30, 1920.

BULLETINS 1921.

No. 2. Survey of the schools of Wilmington, Del. *Part 2.*
No. 5. Part-time education of various types: A report of the Commission on the Reorganization of Secondary Education.
No. 6. Opportunities for study at American graduate schools. G. F. Zook.
No. 7. Organization for visual instruction. W. H. Dudley.
No. 8. Foreign criticism of American education. W. J. Osburn.
No. 9. Present status of music instruction in the colleges and high schools of the United States. Osbourne McConathy.
No. 10. The visiting teacher. Sophia C. Gleim.
No. 11. Pharmaceutical education. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 12. English grammar in American schools before 1850. R. L. Lyman.
No. 13. The housing and equipment of kindergartens.
No. 14. Education of the deaf. Percival Hall. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 15. Medical education, 1918–1920. N. P. Colwell. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 16. Special features in the education of the blind. E. E. Allen. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 17. Educational boards and foundations. Henry R. Evans. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 18. Education in homeopathic medicine. W. A. Dewey. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 19. Kindergarten education. Julia Wade Abbot. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 20. Developments in nursing education since 1918. M. Adelaide Nutting and Isabel M. Stewart. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 21. Higher education. G. F. Zook. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 22. The certification of teachers governed by general State laws and regulations. Katherine M. Cook.

No. 23. Monthly record of current educational publications, May–June, 1921.

No. 24. Suggestions for the reorganization of the schools in Currituck County, N. C. Katherine M. Cook.

No. 25. A school building program for Athens, Ga. Alice B. Fernandez.

No. 26. Educational survey of Elizabeth City, N. C. W. T. Bawden.

No. 27. Training for foreign service. Glen Levin Swiggett.

No. 28. Educational survey of Wheeling, W. Va.

No. 29. Monthly record of current educational publications, September, 1921.

No. 30. Salaries of administrative officers and their assistants in school systems of 100,000 inhabitants or more. W. S. Deffenbaugh.

No. 31. Monthly record of current educational publications, Index. February, 1920–January, 1921.

No. 32. The reorganization of mathematics in secondary education. A report of the commission on the reorganization of secondary education.

No. 33. Music departments of libraries. A report of a committee of the music teachers' national association.

No. 35. The work of the Bureau of Education for the natives of Alaska. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 36. Major projects in elementary schools. Florence C. Fox.

No. 38. Standards in graduate work in education. Leonard V. Koos.

No. 39. Educational reconstruction in Belgium. Walter A. Montgomery. Advance sheets from the Biennial Survey of Education. 1918–1920.

No. 40. Agricultural education. C. D. Jarvis. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 41. Educational work of the Boy Scouts. Lorne W. Barclay. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 42. Teacher placement by public agencies. J. F. Abel. Advance sheets from the Biennial Survey of Education. 1918–1920.

No. 43. Business training and commercial education. Glen Levin Swiggett. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 44. Education in forestry. Proceedings of the Second National Conference, New Haven, Conn., December 17–18, 1920.

No. 45. School grounds and play. Henry S. Curtis.

No. 46. Educational work of the Girl Scouts. Louise Stevens Bryant. Advance sheets from the Biennial Survey of Education. 1918–1920.

No. 47. Education for highway engineering and highway transport. Report of the regional conference held at University of Pittsburgh, November 26, 1920.

No. 48. Educational directory, 1921–22.

No. 49. Monthly record of current educational publications, October, 1921.

No. 51. Statistics of nurse training schools, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.

No. 52. Record of current educational publications to December 20, 1921.

No. 53. Statistics of State universities and State colleges for the year ended June 30, 1921.

BULLETINS 1922.

No. 1. Recent State legislation for physical education. Thomas A. Storey, Willard S. Small, Elon G. Salisbury.

No. 2. Administration of schools in the smaller cities. W. S. Deffenbaugh.

No. 3. Preparation of teachers of the social studies for the secondary schools. Edgar Dawson.

No. 4. Statistics of private commercial and business schools, 1919–20.

No. 5. Reorganization of home economics in secondary schools. A report of the commission on the reorganization of secondary education.

No. 6. State policies in public school finance. Fletcher Harper Swift.
No. 9. Statistics of private high schools and academies. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 13. Review of educational legislation. W. R. Hood. Advance sheets from the Biennial Survey of Education, 1918–1920.

REPORTS.

Report of the Commissioner of Education for the year ended June 30, 1921.

SECONDARY SCHOOL CIRCULARS.

No. 8. The function concept in secondary school mathematics: Report of the National Committee on Mathematical Requirements.
No. 10. Method and content of French course in accredited high schools of the South. J. A. Capps.

READING COURSES.

No. 1. The world's great literary bibles. (Reprint.)
No. 2. Great literature—ancient, medieval, and modern. (Reprint.)
No. 3. Reading course for parents. (Reprint.)
No. 4. Reading course for boys. (Reprint.)
No. 5. Reading course for girls. (Reprint.)
No. 6. Thirty books of great fiction. (Reprint.)
No. 7. Thirty world heroes. (Reprint.)
No. 8. American literature. (Reprint.)
No. 9. Thirty American heroes. (Reprint.)
No. 10. American history.
No. 12. Heroes of American democracy.
No. 19. Master builders of to-day (and reprint).
No. 20. Teaching.
No. 21. Twenty good books for parents (and reprint).

HEALTH EDUCATION PUBLICATIONS.

No. 2. Diet for the school child. (Revised edition.)
No. 5. Child health program. (Reprint.)
No. 6. Further steps in teaching health. (Reprint.)
No. 8. Health training for teachers. (Three reprints.)
No. 9. Your opportunity in the schools. (Two reprints.)
No. 10. Suggestions for a program for health teaching in the elementary schools.
Right height and weight for girls. (Reprint.)
Right height and weight for boys. (Reprint.)
Poster—Health, strength, and joy.
Health card No. 1. What is health? (Reprint.)
Health card No. 2. Rules of the game. (Reprint.)
Price list. (Reprint.)
School Life supplement, No. 9.

HIGHER EDUCATION CIRCULARS.

No. 23. The Slavonic languages and literature in American colleges and universities. Carl W. Hasek.
No. 25. The Rhodes scholarships.

RURAL SCHOOL LEAFLETS.

No. 1. School consolidation and rural life.
No. 2. Transportation of pupils at public expense. J. C. Muerman.
No. 3. Modern equipment for one-teacher schools. Maud C. Newbury.

HOME ECONOMICS CIRCULARS.

No. 5. Government publications of interest to home economics teachers and students. (Revised.)
No. 10. Present status of home economics education.
No. 11. Equipment and rooms for home economics departments.
No. 12. State certification of home economics teachers.

LIBRARY LEAFLETS.

No. 14. What libraries learned from the war. Carl H. Milam.
No. 15. List of references on vocational education.

TEACHERS' LEAFLETS.

No. 15. A survey of the writing vocabularies of public-school children in Connecticut. W. F. Tidyman.
No. 16. Credit for the professional improvement of teachers. Bertha Y. Hebb.

KINDERGARTEN CIRCULARS.

No. 7. Books on the education of early childhood.
No. 8. Folder—What they think of the kindergarten.

INDUSTRIAL EDUCATION CIRCULARS.

No. 7. Higher standards for teachers of industrial subjects. W. T. Bawden.
No. 8. Organization of instructional material in individual units. W. T. Bawden.
No. 9. The contribution of correspondence instruction methods to industrial education. W. T. Bawden.
No. 10. Helping the shop teacher through supervision. W. T. Bawden.

MISCELLANEOUS PUBLICATIONS.

The teaching of civics as an agency for community interest and citizenship. J. J. Tigert.
The Constitution of the United States.
Available publications of the United States Bureau of Education, September, 1921, and reprint of same.
Broadside: Fire Prevention Day.

SCHOOL LIFE.

Vol. 6, No. 12.
Vol. 7, Nos. 1–4.
Index and title page.
Vol. 6, January–June, 1921.

UNFINISHED PRINTING JUNE 30, 1922.

BULLETINS.

1921.
34. Status of the rural teacher in Pennsylvania. Leroy W. King.
37. Malnutrition and school feeding. John C. Gebhart.
50. Engineering education after the war. Arthur M. Greene, Jr.
1922.
7. A report of the higher institutions of Arkansas. George F. Zook.
8. Statistics of teachers' colleges and normal schools, 1919–20. H. R. Bonner. Advance sheets from the Biennial Survey of Education, 1918–1920.
10. Supervision of rural schools in the United States. Katherine M. Cook.
11. Accredited secondary schools in the United States.
12. Dormitories in connection with public secondary schools. Edith A. Lathrop.
14. Status of sex education in high schools.
15. A kindergarten first-grade curriculum.
16. The district owned or controlled teacher's home. J. C. Muerman.
17. Statistics of city school systems. Advance sheets from the Biennial Survey of Education, 1918–1920.
18. The residence of students in universities and colleges. George F. Zook.
19. Proceedings of the junior college conference, June, 1920.
20. State laws relating to education enacted in 1920 and 1921. W. R. Hood.
21. Record of current educational publications to May 15, 1922.
22. Statistics of kindergartens, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
23. High-school buildings and grounds. A report of the Commission on the Reorganization of Secondary Education.

24. Functions and administration of school janitor service. John A. Garber.
25. Higher education in Australia and New Zealand. Charles Franklin Thwing.
26. Philanthropy in the history of American higher education. Jesse Brundage Sears.
27. Statistics of agricultural and mechanical colleges for 1919 and 1920. Walton C. John.

READING COURSES.

17. Foreign trade.
18. Dante.
22. Agricultural and country life.

HEALTH EDUCATION SERIES.

7. The lunch hour at school. (Reprint.)
11. Milk and our school children.

RURAL SCHOOL LEAFLETS.

4. Consolidation of schools in Maine and Connecticut.

HOME ECONOMICS CIRCULARS.

13. Home economics in rural schools.

LIBRARY LEAFLETS.

16. List of references on rural life and culture.

COMMERCIAL EDUCATION LEAFLET.

1. Chicago public high-school course in retail selling and advertising. William Bachrach.

INDUSTRIAL EDUCATION CIRCULARS.

7. Higher standards for teachers of industrial subjects. W. T. Bawden. (Reprint.)
9. The contribution of correspondence instruction methods to industrial education. W. T. Bawden. (Reprint.)

MISCELLANEOUS PUBLICATIONS.

Modern foreign languages in training for foreign service. (Reprint, pp. 123–140, Bulletin, 1921, No. 27.)
Suggestions to authors and typists.

LIBRARY.

A principal activity of the library division is the preparation of answers to letters requesting information or publications concerning particular topics in the field of education. Much research in printed sources of information and elsewhere is often required to collect the material desired by the writers of these letters. During the year covered by this report the library prepared answers to 4,476 such letters of inquiry. Nearly 1,000 visitors from outside were also registered as directly consulting the library and receiving assistance, and many requests by telephone for information and service were answered by the reference staff. The number of volumes loaned to borrowers outside the office was 2,077, many of which were forwarded by mail to points away from Washington.

The library also continued its usual assistance to members of the bureau in the performance of their official duties.

A large number of the printed, mimeographed, and typewritten bibliographies on educational subjects prepared by the library were

distributed. During the year 38 new bibliographies were compiled, and 218 of the reference lists already on file were revised and brought up to date.

Three numbers in the series of library leaflets were issued during the year, as follows: No. 14, "What libraries learned from the war," by Carl H. Milam; No. 15, List of references on vocational education; No. 16, List of references on rural life and culture. The manuscript of a list of references on educational tests and measurements was also prepared for printing as a library leaflet, but publication of this list was suspended pending the preparation of a more comprehensive bibliography on the same subject with the cooperation of outside agencies.

Numbers of the monthly record of current educational publications were issued for September and October, 1921, respectively. Since the latter date the law has required the discontinuance of the record as a periodical, but two numbers have been issued at irregular intervals, giving the new publications received by the Bureau of Education to May 15, 1922. The compilation of an annual index to the monthly record for 1921, to be published in bulletin form, was nearly completed.

The chief of the library division contributed to School Life from September to December, 1921, inclusive, an annotated list of new books in education, covering in each case about a page of the periodical.

The total number of volumes catalogued and classified during the year was 3,431; titles, 2,566. The cataloguing of the new books received was kept up to date, and considerable progress was made besides in handling earlier accessions which still remained uncatalogued. Cooperation with the card division of the Library of Congress in the production of printed catalogue cards for educational books was continued.

The accessions to the library during the year were as follows: Volumes and pamphlets acquired by gift, by exchange, and by purchase, 1,020; serial publications, 3,203; periodical numbers, 8,977; volumes received from bindery, 565. Copyright transfers from the Library of Congress totaled 490 volumes.

The chief of the division attended the annual conference of the American Library Association, held at Detroit, Mich., June 26 to June 30, 1922, as official representative of the bureau. In cooperation with the committee on Federal and State relations of the American Library Association, preliminary plans have been made for a new edition of Bulletin, 1915, No. 25, "Public, society, and school libraries," and it is hoped that the Bureau of Education may begin to collect statistics for this new bulletin early in 1923.

An integral part of the work carried on under the library division is the work of home education, which was inaugurated in the bureau in 1913 to help parents to further their education at home; to help them in the care and training of their children before they are of school age; to help the boys and girls to further their education after they have left school; and to promote the closer cooperation of parents and teachers. As the work progressed it became evident that the field of greatest usefulness for the bureau in this direction was in the extension of education into the home in the nature of reading courses for men and women who had left school, but who wished to further their education under guidance.

Reading courses containing lists of books prepared by leading specialists in the United States have been issued from time to time. At present there are 22 courses, as follows:

1. World's Great Literary Bibles.
2. Great Literature, Ancient, Medieval, and Modern.
3. Reading Course for Parents.
4. Miscellaneous Reading for Boys.
5. Miscellaneous Reading for Girls.
6. Thirty Books of Great Fiction.
7. Thirty World Heroes.
8. American Literature.
9. Thirty American Heroes.
10. American History.
11. France and Her History.
12. Heroes of American Democracy.
13. The Call of Blue Waters.
14. Iron and Steel.
15. Shipbuilding.
16. Machine Shop Work.
17. Foreign Trade.
18. Dante.
19. Master Builders of To-day.
20. Teaching.
21. Twenty Good Books for Parents.
22. Agriculture and Country Life.

Among the readers enrolled in these courses are chemists, farmers, teachers, librarians, lawyers, doctors, housewives, clerks, stenographers, etc. The total number enrolled in all reading courses is 15,578.

During the past year three new courses have been prepared and issued, namely: Teaching, Twenty Good Books for Parents, and Agriculture and Country Life. The assistance of Prof. T. N. Carver, of Harvard University, and Prof. C. E. Ladd, of Cornell University, was secured in the preparation of the reading course on agriculture and country life.

The demand for information regarding the organization and material for conducting parent-teacher associations has been continuous since this work was established. During the past year 469 organizations have been furnished with some kind of information.

In several States, parents in parent-teacher associations have formed reading circles to read the courses under the guidance of the bureau.

During the past two years the bureau has secured the cooperation of State superintendents of education and extension divisions in sixteen State universities and colleges in carrying on the work of the reading courses. Special collaborators have been appointed in each of the following States: Arizona, Arkansas, Colorado, Indiana, Iowa, Kentucky, Louisiana, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Utah, Virginia, Washington, and Wisconsin.

For some years past the director of home education has been closely associated with several national educational organizations and movements, serving upon various committees, and has secured the cooperation of others in the conduct of this work. Among them are some whose active cooperation has given decided emphasis to the work: the National Congress of Mothers and Parent-Teacher Associations, the International Kindergarten Association, the National University Extension Association, and the National Education Association.

Newspapers and periodicals throughout the country have cooperated in this work. State libraries especially in the following States have given their cooperation: Virginia, North Carolina, Oregon, Illinois, and Oklahoma. State library commissions have been particularly active in the work.

Conferences.—A conference of special collaborators and librarians called by the Commissioner of Education, of which the director of home education was general chairman, was held in Lexington, Ky., in cooperation with the National University Extension Association, at which representatives from 25 States and the District of Columbia were present. A report of this conference has been prepared by the director of home education and submitted for printing.

During the past year 11,125 letters have been received; 83,304 copies of reading courses have been distributed, an increase over last year of about 30,000; 5,145 lists of courses and 1,095 bulletins have been distributed; 1,143 new readers have been enrolled and 72 readers have received certificates for completing courses. Publicity articles have been sent to 416 newspapers and periodicals throughout the country. The greatest number of requests for material furnished by this division has come from Maryland, Pennsylvania, Massachusetts, New York, Illinois, and California.

DIVISION OF MAILS AND FILES.

During the year there were received at the bureau 128,100 letters, 34,013 library publications, and 74,580 statistical reports of various kinds. This does not take into account any of the mail matter received by special agents, special collaborators, and bureau offices outside of Washington.

An aggregate of 764,942 sheets of mimeograph material were distributed from the mailing room of the bureau. This consisted largely of circulars of information, blanks for office records, questionnaires relating to investigations, bibliographies on educational subjects, articles on educational topics for publication in newspapers, announcements of conferences called by the commissioner, home reading courses, and form letters used in answering certain kinds of correspondence.

THE ALASKA DIVISION.

In addition to maintaining schools for the children belonging to the aboriginal races of Alaska, the bureau has continued its endeavors in behalf of the entire native communities by extending medical relief, by maintaining sanitary methods of living, by fostering the commercial enterprises of the natives, by promoting the reindeer industry, and by relieving destitution.

During the year the field force in Alaska included 5 superintendents, 144 teachers, 8 physicians, 14 nurses, 5 nurses in training, 16 hospital attendants, and 7 herders in charge of reindeer belonging to the Government. Seventy schools were in operation with an enrollment of approximately 4,000. Orphanages were maintained at Kanakanak and Tyonek for the care of children left destitute by the epidemic of influenza which prevailed in these regions.

The work extends throughout the Territory from the southernmost boundary to the northernmost cape. The majority of the vil-

lages in which the work is located are practically inaccessible during eight months of the year. The larger settlements have been reached, but there yet remain certain regions, especially difficult of access, into which the work has not been extended. Two of these regions were reached during the summer of 1921.

In the great delta between the mouths of the Yukon and Kuskokwim Rivers—a country of marshes and lakes—there are hundreds of Eskimos living in abject squalor. During July a teacher and his wife were sent into this region with the materials for the erection of a school building, the equipment necessary for opening a school, and all the supplies needed for a year. Before the coming of winter precluded the possibility of outdoor activities, the teacher erected the building in which he and his wife must life and to which they must attract the primitive people of the region for instruction in everything pertaining to a higher plane of living. Teachers were also sent to Sleetmute, a primitive village on the upper waters of the Kuskokwim River.

School buildings were also erected at Noorvik, in Arctic Alaska, to replace a small log school building erected by the Eskimos themselves; and on St. Lawrence Island, in Bering Sea, where the school house erected by the carpenter of the U. S. S. *Bear*, with the assistance of the Eskimos, in 1891, had become inadequate; and at Eek, an Eskimo village in western Alaska, the portable building which had been sent to that place having become too small to accommodate the school. It was necessary to send from Seattle to their remote destinations all of the materials for use in constructing these buildings.

During the year the bureau maintained hospitals at Juneau, Kanakanak, Akiak, Nulato, and Noorvik. As heretofore, teachers in settlements where the services of a physician or nurse were not available were supplied with medicines for use in relieving minor ailments.

Reindeer herds are now distributed among the principal native settlements from Point Barrow to the Alaska Peninsula. The annual reports from the more remote herds have not yet been received. It is estimated that if there has been the usual 20 per cent increase there should be in Alaska approximately 259,000 reindeer, two-thirds of which belong to the natives and one-third to the Government, to white men, and to Lapps.

There have been two notable extensions of the reindeer service during the year. On the untimbered slopes of the region tributary to the Alaska Railroad there is unlimited pasturage for reindeer. In order to establish the reindeer industry in this region, during the past winter a herd of 1,352 reindeer was driven by herders in the employ of the bureau approximately 1,000 miles from a point on the Bering Sea coast to grazing grounds in the vicinity of the railroad. Hitherto the exportation of reindeer meat has been confined to shipments from the Nome region to Seattle only during the short season of open navigation in midsummer. The Alaska Railroad will provide unlimited means of transportation for reindeer meat and hides from the interior to the coast at any time of the year.

In the autumn of 1921 the Coast Guard cutter *Unalga* transported for the Bureau of Education a herd of 54 reindeer from the Alaska Peninsula to Kodiak Island. The western half of Kodiak Island is untimbered and abounds in grazing lands on which great

herds of reindeer can be supported. Through its system of distribution of reindeer, the bureau will provide the natives of Kodiak Island with a source of food and establish a future industry for the island from whose ice-free harbors reindeer meat and hides can be readily exported.

The magnitude and value of the reindeer industry resulted in 1920 in the making by Congress of an appropriation to enable the Bureau of Biological Survey, Department of Agriculture, in cooperation with the Bureau of Education, to make investigations, experiments, and demonstrations for the improvement of the reindeer industry in Alaska. The distribution of reindeer among the natives and the use of the enterprise as the form of industrial education best adapted to the races inhabiting the untimbered regions of Alaska remains under the supervision of the Bureau of Education.

With few exceptions, the native villages in Alaska in which the Bureau of Education's work is carried on are not on the routes of steamers which visit the larger settlements. Transportation of appointees and supplies to the remoter places has been secured only with difficulty and by the payment of heavy charges to small trading schooners going to these regions at infrequent and irregular intervals. This is a precarious, inadequate, and expensive procedure.

In compliance with the request for a vessel suitable for use by the Bureau of Education in its Alaskan work, the Navy Department transferred to the Department of the Interior the U. S. S. *Boxer*, a wooden vessel with a carrying capacity of 500 tons and admirably adapted for the purpose contemplated. Funds to cover the expenses of installing an engine and repairing the vessel were provided in the Interior Department appropriation act, approved May 24, 1922.

By means of the *Boxer*, the Alaska division will be able to make its own plans for the economical transportation from Seattle of its appointees and of supplies for its schools, hospitals, and reindeer stations. On its southward voyage it can bring out teachers whose terms of service have expired, and carry for Eskimo herders reindeer meat which they wish to sell in the States. It can carry timber from forested regions to the timberless sections. It can distribute coal among the various settlements. It can be used as a school of navigation and seamanship for young native men.

Activities of the Commissioner.

During the year the Commissioner of Education traveled approximately 75,000 miles; spent 196 days in the field, including Sundays; conducted six national educational conferences; assisted in eight educational campaigns and conferences; addressed 17 national educational associations, 4 regional associations, and 28 State educational associations; visited officially 18 State departments of education, conferred with the chief educational officers of nine other States; addressed 26 institutions of higher learning, 35 business organizations (chambers of commerce, Rotary, Kiwanis, Lion's and other clubs); made a total of 252 addresses, before audiences aggregating 120,000. (Vide figure 4.)

He attended meetings of the Federal Board for Vocational Education, and of the Federal Board for Maternity and Infant Hygiene, of which boards he is a member; also served as chairman of the highway

FIGURE 4.—Map showing the States in which the Commissioner of Education personally has made educational addresses, visited schools, conferred with educational officials, or performed some other kind of field service during the fiscal year 1921–22. During the year the Commissioner traveled upwards of 75,000 miles.

and highway transport committee. He wrote and published 22 articles, and held more than 600 conferences in his office in Washington with those seeking advice and assistance in educational matters.

Recommendations.

Office rooms.—The quarters in the Pension Building now occupied by the Bureau of Education are not at all suited to the work of the bureau. The staff in Washington consists of 87 employees, divided necessarily into comparatively small units, and a large proportion of the staff is engaged on important administrative and highly technical work. To do such work efficiently requires a considerable amount of quiet and privacy, such as can not be secured in the present quarters where nearly all the rooms contain more than 900 square feet of floor space each. Under present conditions it is necessary to place too many specialists in a room, where some of them are frequently disturbed by conferences held by other specialists. Furthermore, in order to provide additional space for the Pension Bureau, it has been necessary to place temporarily one division and one section of this bureau in the court of the Pension Building. The court is not a satisfactory place for employees, especially in cold weather, and I earnestly recommend that steps be taken to provide immediately more suitable quarters for the bureau.

Appropriations.—There is urgent need of much larger appropriations for the work of the bureau, notwithstanding the present program of economy in governmental expenditures. The Federal Government has a responsibility for leadership in education which it can not shirk without risk of peril to our democratic institutions. Increasing popular interest in education, and realization of the significance of universal education in a democracy, leave no room for doubt as to the need.

We have 48 systems of education, each of the sovereign States maintaining its own program, adopting its own methods of organization, administration, and instruction, and determining for itself the amount and character of instruction which shall be provided for the children of its citizens. This is as it should be, for the genius of the American people will probably never accept the idea of a centralized national system of public schools.

However, the most casual investigation shows that some of the States are more successful than others in solving the problems of public education. While some of the States, through years of experience and through the consecutive efforts of generations of trained leaders, have accomplished notable achievements in various phases of educational theory and practice, we find certain other States seeking the answers to many of the same questions, laboriously and at great expense exploring ground that has already been carefully charted.

Much of the arduous labor and costly duplication of experimentation has undoubtedly been saved in the past by the ministrations of the Federal Bureau of Education. As an unbiased, disinterested service agency it has made a unique place for itself. To the limit of its meager resources it has made available to all the States the experiences of the most progressive and the achievements of the most highly endowed. It has supplied to all sections of the country, as no other agency could, the stimulus that comes from knowledge of what others are doing, and through the natural desire to emulate the best and to appropriate the experience of others it has pointed the way to national progress in education.

This country faces a crisis in education that is as acute as that discernible in any other phase of our national life. There never was a time of greater need of informed leadership. The needs in respect to the assimilation of the foreign born and foreign-language speaking, the removal of adult illiteracy, the adjustment of gross inequalities of opportunity for education, and the positive inculcation of proper ideals concerning our form of Government and of respect for constituted authority are becoming more and more evident. The future of our experiment in democracy will be determined largely by what we do or fail to do in the matter of public education. Some even affirm that the success of our cherished institutions hangs in the balance, while we debate whether the percentage of illiteracy and ignorance among our people is 23.5 or 25.

Substantial increase in the support of the Bureau of Education would still be but a conservative investment in the light of the service to the whole people thus made possible.

The Federal Government has expended large sums upon the investigation and remedying of diseases of plants and animals, analyzing the soil, and many other things which have greatly promoted the material welfare of the Nation. Certainly it would be wise to expend something more than the infinitesimal sum the Federal Government now appropriates for the mental and physical welfare of the boys and girls of the Republic.

The limitation of armaments, made possible by international agreements at the Washington conference, should relieve the Federal Government of expenditures which have been either negative or destructive and enable it to promote constructively, in a larger measure, the public welfare.

If burdens of debt already incurred prevent immediate increases in expenditures for education and other welfare interests of our people, would it not be wise and timely to consider at this time a more effective plan of organization of education and welfare in the Federal Government?

President Harding has expressed himself as favoring such a reorganization, and such a plan has possibly been under consideration. A competent authority has stated[1] that "there are now 30 or more different parts of the Government service doing educational work." Each of these agencies has a separate appropriation. President Harding has well pointed out that such an arrangement "magnifies cost and fritters energy."

Certainly some of these activities may be coordinated on some plan generally acceptable which will save money and render a larger service of which the Nation stands in dire need at this time. The requirements outlined in my last report are all as urgent as they were last year, and in some instances have intensified.

Respectfully submitted.

JNO. J. TIGERT,
Commissioner.

The SECRETARY OF THE INTERIOR.

[1] H. R. Report No. 1201, 66th Cong., 3d sess., p. 7.

REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1923

WASHINGTON
GOVERNMENT PRINTING OFFICE
1923

THE UNITED STATES BUREAU OF EDUCATION.

Created as a Department March 2, 1867.
Made an office of the Interior Department July 1, 1869.

COMMISSIONERS.

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

Department of the Interior,
Bureau of Education,
Washington, D. C., September 1, 1923.

Sir: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1923, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

General Activities of the Bureau.

ORGANIZATION AND FUNCTIONS.

The act under which the United States Bureau of Education was created did not put upon the bureau any administrative duties. The administration of education in the American Republic is vested in the respective States and localities. Congress established the bureau as a Federal agency for the purposes of collecting all available statistics, facts, and other information about education not only in the United States and its Territories but in foreign countries, and, further, to disseminate such information and data concerning schools and related subjects for the benefit of those concerned with the development of education, and, finally, to promote the cause of education throughout the country.

Later important administrative powers and functions were assigned to the Bureau of Education. The bureau was made responsible for the administration of the education, support, and medical relief of the natives in the Territory of Alaska by the Secretary of the Interior. Congress charged the bureau, subsequent to its establishment, with certain responsibilities in connection with lands and moneys appropriated by the Federal Government under the Morrill and Nelson Acts in behalf of colleges of agriculture and mechanic arts. The bureau is required to ascertain whether interest derived from sale of lands granted under the first Morrill Act amounts to at least 5 per cent and whether such money is being expended in accordance with the terms of the act. At the end of the fiscal year in 1921 this sum amounted to $1,009,614. Under the second Morrill Act and the Nelson amendment the Federal Government grants annually $50,000 to each of the 48 States and the Territories of Alaska, Hawaii, and Porto Rico. This appropriation, which now amounts to $2,550,000 annually, is administered through the Bureau of Education, which audits the expenditures of these funds and determines whether the money appropriated is being spent in accordance with the purposes for which it is appropriated.

This statement of functions of the Bureau of Education may be summarized as follows:

Nonadministrative functions.—(1) To do research work and be informed on all matters pertaining to education here and abroad; (2) to disseminate such information and put it at disposal of all who desire it; (3) to promote the cause of education generally.

Administrative functions.—(1) Administration of income accruing from lands under the first Morrill Act and annual appropriations under second Morrill Act and Nelson amendment; (2) administration of system of education, support, and medical relief for the natives of Alaska.

In my last report, dated September 1, 1922, I outlined the form of organization which I set up in the bureau at Washington, D. C., for the discharge of these functions. In addition to the organization in Washington, D. C., there is an office in Seattle, Wash., where the superintendent of education of the natives of Alaska makes his headquarters and where supplies and teachers are secured for the Alaska service. At the close of the fiscal year there were eight regular employees and one temporary employee in the Seattle office. The actual work in Alaska will be described later in this report.

Two changes were made in the organization of the Washington, D. C., office during the year just ending. A new division of physical education and school hygiene was created out of what was formerly a section of another division. The importance of this phase of education and the growth of the work both seemed to demand this change. Likewise the statistical work, which had been temporarily made a section of the division of city schools for administrative reasons, has been again set up as an independent division among the general service activities of the bureau. The organization of the bureau, therefore, at the present time consists of two departments, with divisions as follows:

(1) Technical activities: (*a*) Higher education; (*b*) rural schools; (*c*) city schools; (*d*) physical education and school hygiene; (*e*) service, comprising industrial education, commercial education, home economics, educational legislation, and foreign education.

(2) General service activities: (*a*) Editorial; (*b*) library; (*c*) statistics; (*d*) education, medical relief, and reindeer service for the natives of Alaska; (*e*) stenographic; (*f*) mails and files; (*g*) messenger service. (See fig. 1.)

The organization is seen to consist of two general departments or types of activities—the technical and the general service activities. Under the general direction of the commissioner the responsibility of directing these two departments is delegated, respectively, to the assistant to the commissioner and the chief clerk, but the entire administrative and executive authority is reserved in the office of the commissioner.

In order to better unify and promote cooperation in the work of the bureau, I have created a council, which is appointed annually by the commissioner and which meets from time to time for conference and mutual advice. The council is composed of seven persons—the assistant to the commissioner, the chief clerk, three heads of divisions, one member of the technical staff, and one member of

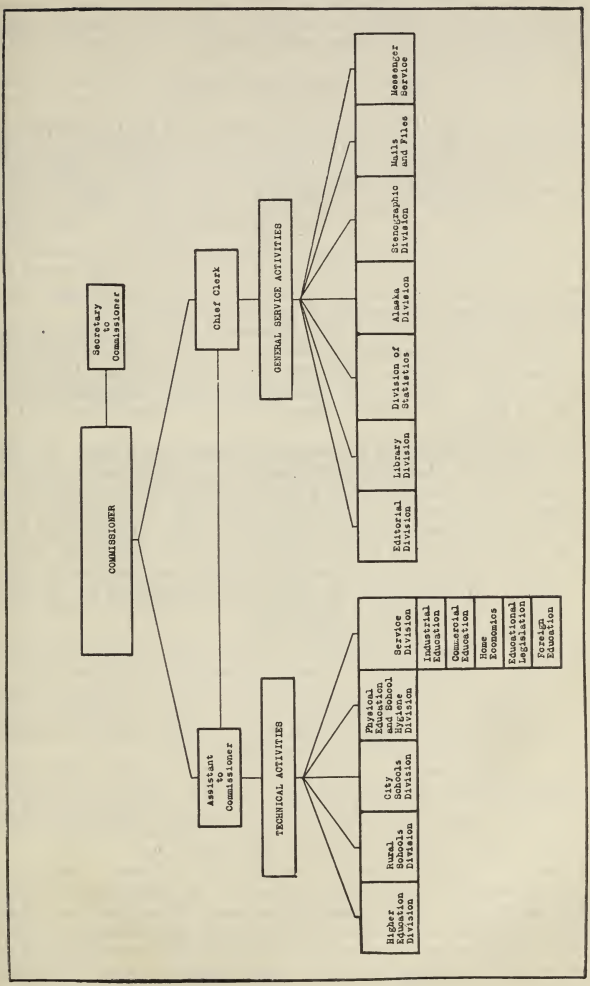


FIGURE 1.—Chart showing the organization of the Washington, D. C., office of the Bureau of Education.

the general service staff. The powers of this council are purely advisory and it has no executive functions.

Under this plan of organization the work of the bureau has consistently improved in efficiency and there does not at present appear to be occasion for great change in the future.

AMERICAN EDUCATION WEEK.

Education in the United States is controlled by the people and not by the Government as is the case in many countries. Every citizen has a voice in determining what kinds of schools we shall have. The people determine in the ultimate analysis how much shall be spent upon schools, whence the money shall come, what kind of teachers we shall have, what they shall be paid, etc. Naturally, experts and educators know a great deal more about schools than the average citizens; but, eventually, we can not make much sound and permanent progress in the improvement of schools without an intelligent approval and support of public sentiment.

With these truths before it, the Bureau of Education several years ago inaugurated the annual observance of a week of education throughout the Nation. The next year the American Legion became interested and now the week is sponsored conjointly by the Bureau of Education, the National Education Association, and the American Legion.

Last year the results of the week were most gratifying. In addition to President Harding's proclamation, proclamations or formal statements were issued by the governors of 42 States and Alaska. Hundreds of thousands of sermons, addresses, and speeches were made upon educational subjects during the week. The bureau made use of the Government broadcasting station at Anacostia, and in many States addresses were broadcast daily from newspaper offices and commercial stations on the special topics assigned for the various days of the week. Fully one-half of the newspapers of the country supported the campaign editorially.

Through the hearty cooperation of the motion-picture producers, distributors, and exhibitors, special educational material was exhibited during the week in practically every motion-picture theater in the country. It is estimated that more than 50,000,000 people were reached in some way during the campaign, nearly 20,000,000 being reached in the motion-picture houses alone.

The program assigned a special topic for each day of the week: Sunday, December 3, For God and Country; Monday, American Citizenship Day; Tuesday, Patriotism Day; Wednesday, School and Teacher Day; Thursday, Illiteracy Day; Friday, Equality of Opportunity Day; Saturday, Physical Education Day.

American education week is designed as a great spotlight to focus the minds of the American people on what the schools are doing, what their needs and objectives are. Thus with an enlightened comprehension of what is being done and attempted by the schools, we may confidently hope, through the observance of this week, to secure a larger and more united popular effort in behalf of schools.

Technical Activities.

EDUCATIONAL RESEARCH AND PROMOTION.

The commissioner holds conferences at regular intervals with the specialists attached to the research divisions of the bureau constituting the technical staff and less frequently with the members of the general service divisions for the purpose of discussing bureau plans and policies and methods of making our service to the country more effective. Regarding the bureau as primarily an agency for service to educators and the general public, we have endeavored to function in the following ways: (1) Field service; (2) research and investigation of special educational problems; (3) dissemination of information; and (4) educational surveys.

(1) Service in the Field.

The bureau constantly receives many more requests for service than it can possibly meet, due to limitations as to personnel and as to funds available for travel expenses. In its selection of those requests which are to receive attention, the bureau has been compelled to discriminate against the more distant sections of the country and to favor especially those sections and communities which are able to meet the necessary travel expenses of representatives of the bureau.

Service rendered in the field by representatives of the bureau takes the following forms: Lectures and addresses upon educational topics before audiences of teachers, students, women's clubs, business men's clubs, and the like; conducting and assisting in special conferences for the consideration of educational problems; attendance upon educational conventions; visiting schools and conferring with school officers and teachers for the purpose of securing information; participation in educational surveys (referred to hereafter).

Some of this field work is undertaken upon the initiative of the bureau in order to secure needed information and in order to keep abreast of current developments. Most of it, however, is done at the request of the school authorities in the several States. Summarizing all types of field service together, I may report that during the fiscal year 25 members of the bureau staff, exclusive of the commissioner, rendered an aggregate of 1,295 days of field service outside of the District of Columbia in 44 different States. (See fig. 2.)

As one feature of this service, 21 members of the staff, exclusive of the commissioner, delivered 267 public addresses, in 37 different States, to audiences aggregating about 60,000 persons.

(2) Research and Investigation.

I am impressed by the increasing volume of the demand for guidance and assistance, which can be met only by a well-organized staff of experts representing all phases of educational development. Many important phases or departments of educational activity are not included in the bureau organization, and our service is thus severely handicapped.

The scope of the research work of the bureau is suggested by the titles of the publications issued, as given in the following paragraphs and in the report of the editorial division, pages 24–28.

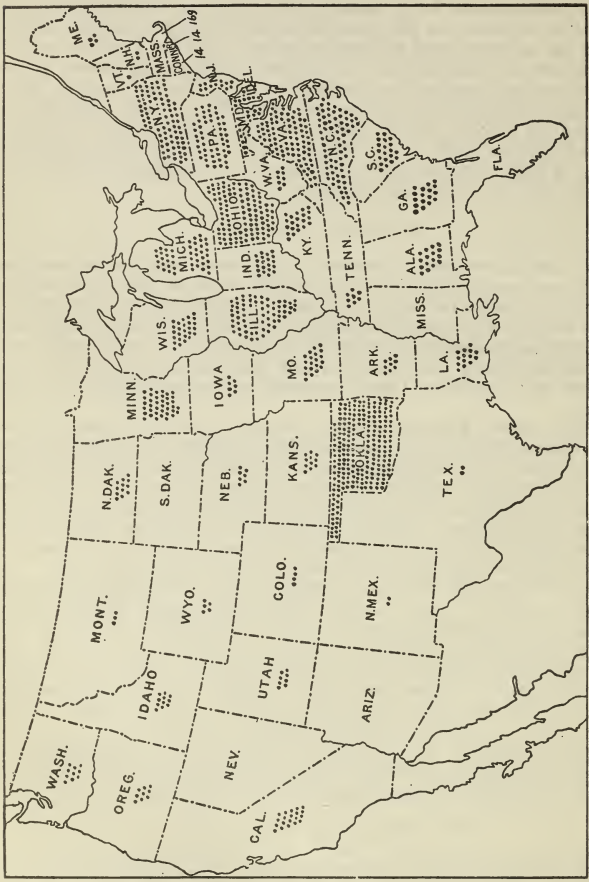


FIGURE 2.—During the 1922–23 fiscal year 25 members of the staff of the Bureau of Education, exclusive of the commissioner, rendered an aggregate of 1,295 days of field service of some kind (including Sundays and time spent in travel prorated) in 44 different States. Each dot represents one day of field service.

(3) DISSEMINATION OF INFORMATION.

The chief means employed for the dissemination of information are: Publication and distribution of printed bulletins and pamphlets and mimeographed circulars; correspondence, constituting a large

part of the bureau's activities, as indicated elsewhere; public addresses; and conduct of educational conferences.

Events are fully justifying the policy, to which I referred in my last report, of reducing the number of extensive and exhaustive reports and increasing the number and variety of briefer bulletins and circulars. We are thus able to treat a wider range of topics and to reach a larger audience. We are still handicapped by the limitation of 12,500 copies on the editions of our bulletins, which, obviously, bears no relation to the fact that there are upward of 800,000 school teachers and officers in the United States, with all of whom the bureau should be in some sort of communication.

(4) Educational Surveys.

One of the most important types of service rendered by the bureau, and probably the most far-reaching in effect, is in its conduct of educational surveys. During the past 10 years, especially, there has been a great popular awakening to the significance of education, and there has been manifested in many quarters the desire to know as definitely as may be just what are the objectives of public education and just how effectively our schools are organized and equipped for the attainment of these objectives. The scientific inquiry into these conditions, and the formulation of conclusions and recommendations based on the findings, undertaken by one or more persons specially qualified, is known as an "educational survey."

Many of these formal surveys have been made by individuals, and by public and private agencies of many types. As I indicated in my last report, this bureau has taken a leading place in the movement and has conducted educational surveys in nearly every State of the Union. The bureau possesses unique qualifications for service of this type, in that it is able to approach each situation without bias or partisanship, and the members of its staff now represent the collective judgment gained by years of experience in survey work in all sections of the country.

The staff of the bureau is inadequate to meet the many demands, and it is necessary to supplement our forces by the temporary employment of experts from the outside.

During the fiscal year 1922–23 nine educational surveys were made (see fig. 3), as follows:

State system of public education, Oklahoma	1
Higher education	4
State system of higher education and activities and functions of State board of administration, Kans.	
State system of higher education, Massachusetts (field work in 1922–23; report to be completed in 1923–24).	
State College of Agriculture and Engineering, North Carolina.	
State Industrial College, Georgia.	
Rural schools; county systems of public education	2
Beaufort County, N. C.	
Currituck County, N. C., including educational, social, and vocational conditions.	
City schools	2
Public-school system, Alexandria, Va.	
High-school building program, Oak Park, Ill.	
Total	9

ACTIVITIES OF TECHNICAL DIVISIONS.

In addition to the foregoing general statements the activities of the several research divisions may be summarized as follows:

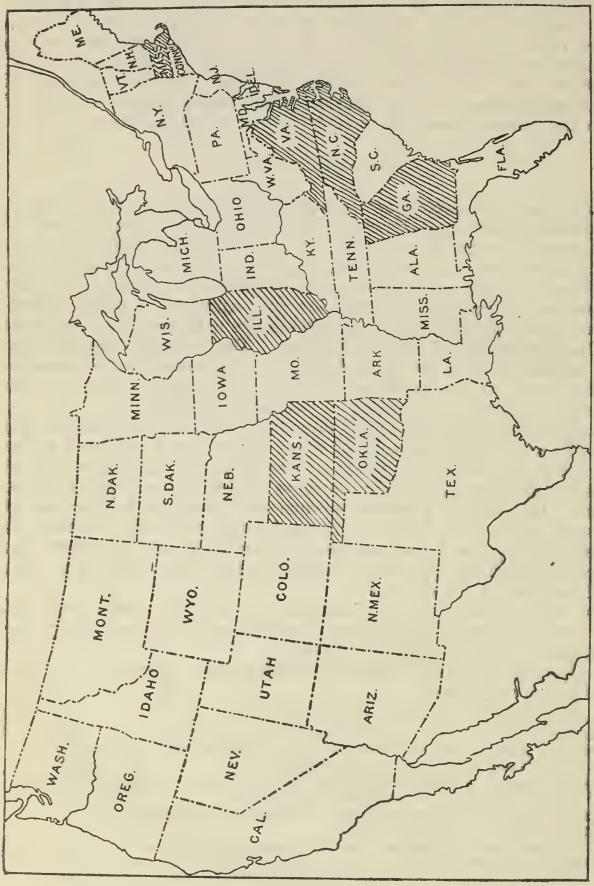


FIGURE 3.—During the fiscal year 1922–23 the Bureau of Education conducted nine educational surveys in seven States: Georgia, Illinois, Kansas, Massachusetts, North Carolina, Oklahoma, and Virginia.

(1) DIVISION OF HIGHER EDUCATION.

During the year the members of the division of higher education have largely been occupied with surveys of higher institutions in Kansas, Oklahoma, North Carolina, Georgia, and Massachusetts.

Educational surveys.—The survey report on the five Kansas State institutions of higher education was submitted to the State board of administration November 25, 1922. The report was largely concerned with the efficiency of the central board in governing the institutions and the adjustment of functions between and among the several institutions.

The Oklahoma survey was undertaken as a part of the comprehensive survey of the entire educational system in that State. The chief questions under discussion were the needs of the State in higher education, the methods of governing the higher institutions, their respective functions, and their financial needs. The full report was published by the local survey commission as a part of the general report, and a digest was included in Bulletin 1923, No. 14, published by the bureau.

The survey of the North Carolina College of Agriculture and Engineering outlined a plan for the internal administration of the institution to meet the development of the institution. The report was published by the local board of trustees.

The survey of the Georgia State Industrial College was undertaken with a view of determining the efficiency of the work being done at that institution. The study showed clearly the very backward condition of the institution and warned the State that unless considerable improvement was made in the character of the work at the institution it might prove necessary for the bureau to recommend the withdrawal of the annual Federal appropriation of $50,000 granted to the State under the second Morrill Act.

The Massachusetts survey of higher education is in progress. The specialist in higher education is undertaking to render a fact-finding report on the basis of which a local commission will make recommendations. A number of prominent university and college executives have undertaken special investigations for the survey.

Special studies and reports.—Other studies which have been prepared in the division and published during the year include:

Statistics of Land-Grant Colleges for the year ended June 30, 1921; Accredited Higher Institutions: Accredited Secondary Schools; Hampton Agricultural and Normal Institute: Its Evolution and Contribution to Education as a Federal Land-Grant College; Biennial Survey of Higher Education, 1920–1922.

In addition to the printed bulletins and pamphlets prepared in the division or under the direction of members of the division are the following studies, most of which have been issued in mimeographed form: Statistics of current (1922–23) enrollments, income, and salaries at State universities, colleges, and teacher-training institutions; courses in petroleum engineering in universities and colleges; current (1922–23) enrollments in engineering schools; survey of the Georgia State Industrial College; survey of the North Carolina College of Agriculture and Engineering; preliminary survey of the Young Men's Christian Association collegiate work.

Manuscripts which are now in process and will shortly be completed include: Survey of higher education in Massachusetts; statistics of land-grant colleges, 1921–22; decennial report on land-grant college education.

Important educational conferences.—The specialist in rural and technical education has devoted a considerable portion of his time to several educational conferences undertaken by the Bureau of Education in cooperation with other organizations. The second national conference on education for highway engineering and highway transport included engineers, educators, leaders in the Federal, State, and national highway organizations and leaders in the automotive industry. The proceedings of this conference were published by the highway education board. Seven thousand copies of the proceedings have been distributed throughout the country. Also there have been held several State conferences along the same line, the proceedings of which have been published locally.

Under the direction of the Commissioner of Education the specialist in rural and technical education also organized a third national conference on Negro education, which was held at Tuskegee Institute, Alabama, January 15–16, 1923. The conference developed the work of the previous conferences at Atlanta and Nashville and devoted considerable attention to the development of the junior college work in agriculture and to standards of work in trades and industries, as well as problems of finance. The meeting, as upon previous occasions, was attended by leading white and colored representatives of industrial education in the South.

Addresses have been delivered by the members of the division at the following educational meetings: Association of American Colleges; American Association of Junior Colleges; Association of Land-Grant Colleges; Association of Tennessee Colleges; Association of North Carolina Colleges; Society for the Promotion of Engineering Education; Joint Meeting of Middle Western and Eastern Business Officers' Associations; Association of Urban Universities; Highway Education Conference at Washington; and colleges in North Carolina, Tennessee, Maryland, Massachusetts, and the District of Columbia.

(2) Division of Rural Schools.

The work of the division of rural education has continued along established lines and has been augmented somewhat by opening up certain new ones. Progress in rural education is leading toward more differentiation and a higher degree of specialization in this field. In conformity with this progress, it is the aim of the division at this time to work toward more specialization on the part of its members in order to be of greater assistance in particular and specialized fields. Members of the division are now specializing in the fields of administration, supervision, consolidation, rural high schools, rural school statistics. Other special fields will be concentrated upon as conditions permit.

During the year the division has entered upon several cooperative projects and has established cooperative relationships in the preparation of manuscripts or in the conduct of investigations with individuals and institutions outside the bureau in the field of rural education. It is expected that this type of service will be continued and enlarged.

Field work of the division.—During the fiscal year six members of the division staff spent a total of 415 days in field work in 39 different States. Major lines of field work pursued are the following:

Educational surveys.—Early in the fiscal year two written reports were completed for the Arkansas Survey Commission as a result of a survey made during the preceding year—one a full report, the other a digest later published by the bureau. During October and November a field survey of the State of Oklahoma was made under the direction of the Commissioner of Education. The section concerned with rural schools was made under the direction of the chief of the rural schools division, assisted by two members of the division and specialists from outside the bureau. Approximately 126 days were spent by members of the division in field work. Seventeen counties were visited by members of the staff studying rural education. Tabulation of questionnaire returns and the statistical summaries for the survey were made under the direction of a member of the division. Two reports were prepared—a full report published by the Oklahoma State Survey Commission, and a digest published by the Bureau of Education.

At the request of the board of education, the chief of the division, assisted by one member of the staff, made an educational survey of Beaufort County, N. C. Approximately two weeks were spent in making the field survey. Reports were prepared and submitted to members of the board and county superintendent, first in oral and later in written form. In addition a digest of the report was prepared for publication.

At the request of the board of education and the county superintendent three members of the division, working in cooperation with members of the State department and with two members of the faculty of Cornell University, made a social and vocational survey of Currituck County, N. C., following a survey of administrative organization previously made by the bureau. With this survey as a basis, the same committee is preparing in cooperation with the county superintendent, supervisor, and teachers a course of study for the rural schools of the county. The preliminary report of the occupational survey is nearing completion.

Field work of an advisory nature.—Several members of the division have been called to various States or counties by State and county officials to act in an advisory capacity in the carrying on of educational projects or in the initiation of new activities. One member has acted on an advisory committee with members of a State department of education in the location of high schools in five counties. Another member has acted in an advisory capacity with four county superintendents in two States in promoting school consolidation. Another member advised with school officials, trustees, superintendents, and teachers of three counties and gave demonstrations for the purpose of assisting in improving rural school supervision. Another member assisted members of the State department of education in an advisory capacity for the purpose of working out a prevocational program in the teaching of agriculture in the rural counties of that State.

Investigation.—In its capacity as a clearing house for information for educators in the field of rural education and in connection with the work in several different lines of research, members of the division have made approximately 50 visits to 34 States. The investigations or research studies in the interests of which these visits

were made are along the following lines: Consolidation of rural schools, standardization, supervision, special methods of instruction, organization and curricula of rural high schools, organization for the administration of rural school systems.

Addresses and conferences.—Members of the division are called upon frequently to participate in conferences and to deliver addresses at commencements, summer schools, teachers' institutes, State teachers' associations, and a number of other educational meetings, as well as national and State conferences of organizations interested in rural education. During the year members of the division conducted one bureau conference, assisted in several others; and four members addressed or made reports to the National Education Association. Six members of the division made a total of 118 addresses to approximately 23,000 people in 26 different States.

Research.—Research studies pursued or special investigations made during the year cover the following subjects: Administration for and methods pursued in the supervision of rural schools, consolidation of rural schools, teaching agriculture in rural elementary schools, organization and curricula of rural high schools, visual education, standardization of rural schools, units of organization in school administration, organization of a curriculum for a rural county, State aid for rural schools, rural teachers' salaries, school conditions in country villages, courses of study in elementary agriculture, plans for school buildings.

Publications.—The research and investigation work of the division enables it to be a clearing house of information on rural school administration, supervision, methods and practice throughout the country. A special effort has been made during the past two years to prepare for distribution a large number of reports giving information on subjects about which large numbers of inquiries come to the bureau through correspondence. Besides the field work previously reported, information is disseminated by means of bulletins reporting the results of the more intensive research studies; of leaflets sometimes resulting from research and sometimes from the collection of information; of circulars, usually mimeographed and intended for quick distribution, containing information the value of which depends in large part upon its timeliness; rural news letters prepared for country newspapers, agricultural weeklies, and the like, and which contain information concerning rural schools prepared especially for farmers; articles on rural education prepared for School Life, the bureau's monthly publication; and articles on rural education broadcast by radio. During the year there have been prepared in the division 5 circulars, 18 leaflets, 7 bulletins, 6 news letters, 9 radiograms, and 7 articles for School Life.

Other activities.—During the year a mailing list of 3,000 country newspapers has been prepared; 2 moving-picture films and several sets of slides circulated in a number of schools and counties in 15 different States; 38 manuscripts have been reviewed and contents passed on or revised by members of the division; members have assisted in the preparation of broadsheets for education week, 1922; in the preparation of suggestions to county superintendents for the observation of education week; and one member prepared 2 pageants

for use in rural schools, one for education week, 1922, and one for education week, 1923.

The correspondence of the division contains requests for information covering the whole field of rural education, requires an extended knowledge of the field, and often considerable investigation.

(3) Division of City Schools.

During the year special reports were prepared by the division of city schools on the following subjects: Organization and function of the board of education in cities, based on recommendations of 20 city school surveys; significant movements in city school systems; recent progress in secondary education; length of school day in primary grades; value of the school census; proportion of municipal funds devoted to public education; programs of study in junior high schools; all-year schools; regulations of city school boards regarding high-school fraternities; research bureaus in city school systems; the city school board; report of the first national conference on the work-study-play plan.

Material for use in the observance of American education week was prepared and compiled in the division, and the chief of the division served as chairman of the committee representing the bureau in the campaign.

One specialist prepared a bulletin for the use of teachers on a series of projects based on highway transportation entitled "Main Streets of the Nation." This was based on a study of the principal interstate highways of the United States, and included lesson outlines and suggestions for teachers growing out of a series of demonstration lessons given in a fifth grade in the Washington, D. C., schools. Other activities included studies and reports on curriculum for the kindergarten and first primary grade, current tendencies in primary education, characteristics of the 6-year-old child.

Educational surveys.—Two surveys of conditions in city school systems were made: (1) Public schools of Alexandria, Va.; (2) high-school building program, Oak Park, Ill.

National conference on the work-study-play plan.—One specialist made the preliminary arrangements and organized the program for the second national conference of city superintendents and principals of high schools on the work-study-play plan of school organization. The conference was called and presided over by the Commissioner of Education and held in cooperation with the department of superintendence of the National Education Association at Cleveland, Ohio, February 27, 1923. There were present 225 superintendents and principals from all parts of the country, and formal request was made that the bureau organize an information service for school authorities which have adopted or are considering this plan, that the bureau organize and direct the activities of a series of committees for investigation and report on special problems, and that the commissioner call a third conference to meet in February, 1924.

Committees of superintendents and principals are now at work, under the direction of the bureau, on the following topics relating to the work-study-play plan: Organization and types of program;

use of the auditorium; nature study, music, shopwork, and other special activities; play; education of public opinion; building programs; training of teachers.

Radio service.—One specialist served as chairman of a committee which organized and maintained an educational radio service from December 7, 1922, to April 19, 1923. During this period 36 messages of an average length of 1,500 words were broadcast, released twice each week, on Monday and Thursday evenings. During the latter half of this period copies of the message were sent to a selected list of 1,800 newspapers. Copies of the messages were also sent to two radio stations on the Pacific coast, to be broadcast from there, and to the Foreign Language Information Service. The service was discontinued for lack of adequate personnel and equipment.

Kindergarten education.—Several circulars on kindergarten education have been issued during the year, including experiments in preschool education; kindergartens, past and present; suggestions concerning the application of the project method to kindergarten education; how the kindergarten makes Americans; chapter on kindergarten education for the Biennial Survey of Education. A bibliography on preschool and kindergarten-primary education and a circular on prefirst-grade training are in press. A bulletin on health education in the kindergarten, prepared in cooperation with the physical education and school hygiene division of the bureau, is also in press.

The kindergarten specialists have written many articles for different purposes and occasions. These included reports of three important kindergarten meetings for different periodicals, seven articles for education week and three for the bureau's radio service, five for different periodicals, and a chapter for a book on the kindergarten pioneers in preparation by a committee of the International Kindergarten Union. A program was also prepared for armistice day. A mimeographed leaflet of suggestions on kindergarten legislation and five letters to kindergarten teachers, training teachers, and supervisors were sent out. Suggestions to State presidents of women's clubs and parent-teacher associations were also prepared to send out on request.

The kindergarten specialists spent 81 days in field work of different kinds in 8 different States. They gave 34 addreses to audiences totaling 17,000 persons. Five of the addresses were before State associations, and two of these were on the general program. They held or attended 80 group or individual conferences at different times and places. They have had important contacts with outside educational organizations. One has been a member of the editorial council of the National Education Association Journal and another an officer of the Progressive Education Association. Both have been members of important committees of the International Kindergarten Union.

Three of the units of the moving-picture film, secured through the cooperation of the International Kindergarten Union, have been combined to make one film, and this is now completed and in use. The lantern slides and charts have been in constant demand and have been sent to 12 States and to Japan. Both specialists assisted in the Alexandria school survey.

Several important projects are in progress, including: An inquiry into the kindergarten-primary courses in the teacher-training institutions; a study of kindergarten legislation; and an inquiry into the courses given in colleges on child care and training.

(4) Division of Physical Education and School Hygiene.

Field work.—The work of the division has been seriously interrupted by resignations from the staff, and by inability to fill promptly the vacancies occurring at the low salaries available. The four specialists of this division were on active duty an aggregate of about 26 months. These four spent 163 days in field work, in 24 States; three members made 15 public addresses, to audiences aggregating about 2,300.

Publications.—Publications of the division included 12 new bulletins and 1 bulletin and 1 revision begun the previous year; 1 home reading course; 6 circulars on public-school nursing; 4 circulars on physical education; 12 news articles. In addition, the manuscripts of 2 bulletins were revised; 1 circular on health-teaching devices and 2 health posters were prepared; 2 reports were edited and prepared for publication. Material was collected in the field for 3 additional bulletins.

Other activities.—Six educational conventions were attended in 5 States, and important cooperative relationships were established in 24 States. Two members of the division assisted in the Alexandria (Va.) city school survey.

Studies in progress include: School health supervision; health education in high schools; preparation for health teaching in normal schools and colleges, and school credits for courses in hygiene and physical education.

School buildings and grounds.—The special agent has been in constant demand for conferences and correspondence with boards of education, school officers, and school architects in regard to the planning and construction of school buildings and the selection and layout of school sites. Many sketches of school-building plans to meet special conditions have been prepared, and architects' drawings and blue prints have been examined and revised.

In rendering this service, field trips to the following cities have been undertaken: Tuskegee, Ala.; Waverly, Tenn.; Bowling Green, Ky.; Gadsden, Ala.; Sevierville, Tenn.; Troy, Ala.; Albany, Ala.; Berea, Ky.; Danville, Va.; McKenzie, Tenn.

Work in progress includes revision of two bulletins on "American schoolhouses" and "Rural schoolhouses and grounds." Both of these valuable bulletins have been out of print for several years and are greatly in demand.

The field of health work is many-sided, embracing whatever has a bearing on "health in education" and "education in health." Only a few aspects of the problem have ever been touched by the Bureau of Education, although it has an unusual opportunity for service in the field. Questions are opening up which were not dreamed of a few years ago, and possibilities that are even yet only partly comprehended.

Investigation is needed to develop satisfactory solutions for these new problems, and to stimulate higher ideals and better practices in matters of school health. The health of the child should be the first objective in all education, and the public-school program should not be circumscribed by a narrow view of the problem.

(5) Service Division.

The organization of the technical staff of the bureau includes, in addition to the divisions of higher education, rural schools, city schools, physical education and school hygiene, a number of specialists who serve definitely in more than one of these fields. These latter are brought together for administrative purposes in the service division, which includes specialists in industrial education, commercial education, home economics education, educational legislation, and foreign education.

Industrial education.—The specialist in industrial education arranged the program and conducted the thirteenth annual three days' conference on the preparation of teachers of manual arts and industrial education, a conference held at the request of institutions in the Mississippi Valley States, at the University of Wisconsin, Madison, January 11–13, 1923. A report of the proceedings was published.

Four national conferences of specialists in industrial education and others, called by the Commissioner of Education, were organized and conducted in cooperation with the agencies indicated, and reports of the proceedings were published as follows:

"Studies about occupations in public schools"; in cooperation with joint convention of the National Society for Vocational Education and the Vocational Education Association of the Middle West, Detroit, Mich., November 29, 1922.

"Standards of eighth-grade attainment in shopwork"; Western Arts Association, St. Louis, Mo., April 30, 1923.

"Means of improvement for teachers in service"; Eastern Arts Association, Providence, R. I., May 2, 1923.

"Art as a vocation"; American Federation of Arts, St. Louis, Mo., May 22, 1923.

The attendance at these five conferences included 445 delegates, representing 28 States, the District of Columbia, and Canada. (See fig. 4.)

A review of recent progress was prepared and published as the chapter on "Vocational education" in the Biennial Survey of Education.

The specialist represented the bureau on the National Committee on a Code for Lighting School Buildings, in cooperation with the American Engineering Standards Committee, the Illuminating Engineering Society, and the American Institute of Architects. He also represented the bureau as a member of the advisory council and member of the committee on education of the Horological Institute of America.

Commercial education.—During the year, the specialist in commercial education made the necessary preliminary arrangements and conducted a series of regional conferences, called by the Commissioner of Education, attended by business men and high-school teachers of business subjects and social studies. These conferences were conducted in cooperation with the United States Bureau of

Foreign and Domestic Commerce, and with the local agencies indicated. Reports of the proceedings have been prepared for publication by the Bureau of Education, or are in preparation.

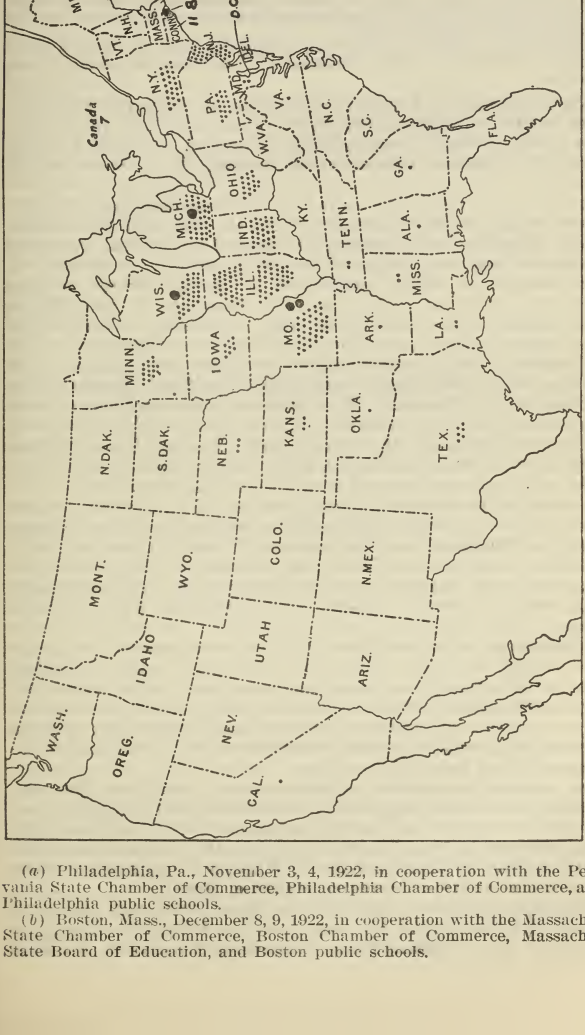


FIGURE 4.—Distribution of delegates to five conferences of specialists in industrial education, 1922–23: Detroit, Mich.; Madison, Wis.; St. Louis, Mo. (2); Providence, R. I.; 445 delegates, representing 28 States, District of Columbia, and Canada.

(*a*) Philadelphia, Pa., November 3, 4, 1922, in cooperation with the Pennsylvania State Chamber of Commerce, Philadelphia Chamber of Commerce, and the Philadelphia public schools.

(*b*) Boston, Mass., December 8, 9, 1922, in cooperation with the Massachusetts State Chamber of Commerce, Boston Chamber of Commerce, Massachusetts State Board of Education, and Boston public schools.

(*c*) New York City, March 2, 3, 1923, in cooperation with the New York State Department of Education, Merchants Association of New York, and the New York City High School Teachers' Association.

(*d*) Columbus, Ohio, March 9, 10, 1923, in cooperation with the Ohio State Department of Education, Columbus Chamber of Commerce, and the Columbus Board of Education.

(*e*) New Orleans, La., May 4, 5, 1923, in cooperation with the Louisiana State Department of Education, New Orleans Association of Commerce, and the parish school board of New Orleans.

(*f*) Atlanta, Ga., May 11, 12, 1923, in cooperation with the Georgia State Department of Education, Atlanta Chamber of Commerce, and Atlanta Board of Education.

The third annual conference of specialists in commercial education was conducted in cooperation with the Vocational Education Association of the Middle West, in joint convention with the National Society for Vocational Education, at Detroit, Mich., November 29, 1922.

A conference of specialists, called by the Commissioner of Education, was conducted in cooperation with the National Commercial Teachers' Federation, at Chicago, Ill., December 26, 1922. A report of the proceedings was prepared for publication by the bureau.

A conference of college instructors in foreign-service training subjects was conducted in Chicago, Ill., December 27, 28, 1922, at which 11 colleges and universities were represented. A report of the proceedings was prepared for publication by the bureau.

The second annual conference of specialists was conducted in cooperation with the Eastern Commercial Teachers' Association at Providence, R. I., March 29, 1923. Other similar conferences were arranged and conducted as follows: South Carolina State Teachers' Association, Columbia, S. C., April 12, 1923; National Foreign Trade Council, New Orleans, La., May 2, 1923; College Instructors in Foreign Service Training Subjects, New Orleans, La., May, 1923.

The specialist in commercial education served as a member of the advisory committee of the department of education of the National Federation of Business and Professional Women's Clubs, as chairman of the committee of fifteen on educational preparation for foreign service, as chairman of the committee on commercial engineering, and in advisory capacity to the National Foreign Trade Council.

The following reports of special studies were prepared for publication: College entrance credits in commercial subjects; college courses in advertising and merchandising, and in insurance and realty; commercial research bureaus in colleges and universities; collegiate schools of business; commercial engineering; foreign service training; college courses in transportation, accounting, banking, organization, secretarial studies.

Home economics education.—On December 8, 1922, Mrs. Henrietta W. Calvin, the bureau's specialist in home economics, resigned to accept a more remunerative position as supervisor of the home economics in the public schools of Philadelphia, Pa., and was succeeded, on April 2, 1923, by Miss Emeline S. Whitcomb, professor of home economics, University of Montana, Missoula, Mont.

During the year the specialists in home economics delivered addresses and represented the bureau at the following educational conventions: New England Home Economics Association, National

Education Association, American Home Economics Association, Wisconsin State Educational Association, Pennsylvania Schoolmen's Week, Georgia State Home Economics Association, Georgia State Teachers' Association; assisted in a survey of the public schools of Alexandria, Va.

Manuscripts prepared for publication by the bureau include: Chapter on recent progress in home economics for the Biennial Survey of Education; 6 home economics circulars; reports of proceedings of a series of 10 conferences of specialists in home economics conducted by the bureau.

Conferences of teachers and supervisors of home economics, called by the Commissioner of Education, were conducted in cooperation with the National Education Association at Boston, Mass., and in New York City. Revised mailing lists were prepared of directors and teachers of home economics in city school systems, colleges, universities, and normal schools.

The following special studies are in progress: Status of home economics instruction in junior and senior high schools; status of graduate work in home economics in colleges, universities, and normal schools; bibliographies on various phases of home economics education.

Educational legislation.—During the year the specialist in educational legislation prepared for publication reports of special studies and investigations, as follows: Legal status of Bible reading in the public schools; chapter on educational legislation for the Biennial Survey of Education; five articles for use in connection with the observance of American education week; report on system of support and administration of public education in Oklahoma; and outline of the development of the State system of public education as portions of the report of the educational survey made by the bureau; similar report for the State of Texas; legislation relating to high-school fraternities; regulation of private schools.

At the request of the State department of education he prepared a special report rearranging and codifying the State school laws of Arkansas. In addition digests were prepared for publication of the 1922 school legislation of 12 States. Nineteen numbers in the series of legislative circulars were issued, giving current reports on educational measures introduced and passed in the several State legislatures.

Work in progress includes: Completion of digest of laws relating to education recently enacted by the several State legislatures; laws relating to free textbooks in the public schools.

Education in foreign countries.—During the year reports have been prepared on educational systems and school conditions in the following countries: Latin America, including Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Paraguay, Peru, Uruguay, Venezuela, Mexico, Cuba, Costa Rica, Guatemala, Honduras, Nicaragua, Salvador, Panama; Czechoslovakia, Poland, Spain, Portugal, Italy.

The Italian decree of May 6, 1923, providing for reforms in the secondary and boarding schools of Italy was translated into English; the school laws of Ecuador and Venezuela were translated from Spanish into English; and two scientific articles on liquid air were translated for other Government departments.

Six special reports were prepared for release by radio, as follows: The people's high schools of Denmark; thrift activities in foreign schools; bookwork and handwork in the schools of Europe; recent continuation school laws in foreign countries; a first day of school in Stockholm; what Europe does for her gifted children. Several articles were prepared for publication in School Life, including: Editorial notes from foreign countries; some folk-school experiments in Germany.

The bureau receives an increasing number of requests for information concerning opportunities and requirements for obtaining teaching positions in foreign countries; also concerning summer schools and entrance requirements of foreign educational institutions and concerning the exchange of students and instructors.

A special study is now in progress of the proper evaluation of school credits obtained in foreign countries in terms of school systems in operation in the United States. Foreign students who come to this country to complete their education in our colleges and universities are now numbered by the thousands annually, and the number is increasing. Those students who come from the older and better-known systems of education bring school credentials that can be evaluated in most cases by the registrars of the institutions concerned. But there is an increasing number of these foreign students coming from the newer systems of education and from less well-known institutions of learning, whose credentials are more difficult to evaluate. Many of these certificates and diplomas are sent by school officers to the Bureau of Education for translation, interpretation, and evaluation.

General Service Activities.

As already stated, in the organization of the work of the Bureau of Education, consideration has been taken of the fact that there are two general types of activities involved, activities which have been described as "Technical" and which have been presented in the foregoing part of this report, and another type of activities which, for want of a better term, we describe as "General service activities." To these we turn now.

It should be noted at the outset that the general service activities of the Bureau of Education are, on the whole, of such a character that they affect and relate themselves to the entire staff of the bureau. And yet, while some of these activities require comparatively little or no technical training, others require a technical knowledge in some instances quite comparable to a large part of the work done in those divisions which have been described in this report as "Technical." Among those general services which might be regarded as nontechnical are the stenographic division, the mails and files, and the messengers. At the present time there are 25 employees in the stenographic division, 3 in the mails and files division, and 3 in the messengers division.

On the other hand, the divisions which discharge the editorial, library, statistical, and Alaska services involve much technical training and are among the most responsible and important activities of the Bureau of Education.

The editorial division handles all circulars, leaflets, bulletins, and similar publications, as well as the periodical School Life. The library of the Bureau of Education has now the largest collection of purely pedagogical and educational literature in the world, with possibly one exception. The necessity of gathering educational statistics is one of the most definite and significant of all the functions of the bureau. The Alaska division involves the administration of a school system as well as a system of medical relief and numerous commercial and industrial enterprises, and more than two-thirds of the entire appropriation of the Bureau of Education is expended in the work of this division.

It may readily be seen, therefore, that some of the so-called "General service activities" are nothing less than highly technical and quite as important as any of the work that the bureau is doing. The divisions characterized as "General service" have been brought together for convenience in solving an administration problem, inasmuch as all these divisions are made responsible through the same administrative officer to the commissioner.

ACTIVITIES OF GENERAL SERVICE DIVISIONS.

(1) Statistical Division.

The Bureau of Education publishes biennially a comprehensive survey of education in the United States and in some foreign countries. This Biennial Survey is presented in statistical as well as in textual form, various fields of education being covered by experts on and outside of the bureau's staff. This publication is the only work of its kind undertaken anywhere and is an important contribution to the history of education. It is in large demand not only in this country but in foreign countries.

The larger part of the time of the statistical division during the fiscal year just ended was occupied in completing the few statistical studies for the Biennial Survey for 1918–20 which were incomplete at the close of the last fiscal year, and in collecting, tabulating, and compiling the statistics for the Biennial Survey for 1920–22. The statistical volume of the Biennial Survey comprises complete statistics for the period involved for all universities, colleges, normal, high, and elementary schools, as well as other establishments and institutions doing educational work of special and varied kinds. The completion of the regular work of the Biennial Survey has been progressively delayed for a number of years, due largely to the increasing complexity and rapid growth of educational systems and institutions without appreciable addition to the bureau's statistical personnel and facilities.

During the past year the bureau undertook an additional task of considerable proportion by cooperating with the American Classical League, which, under the direction of its president, Dean Andrew West, of Princeton University, is undertaking the most exhaustive study of its kind made up to this time of any phase of education, a study of foreign languages in public and private high schools. Questionnaires for this study were prepared and sent out and returns tabulated for the American Classical League by the Bureau of Education. In addition to these larger undertakings during the year, the statistical division completed the following studies: Three sta-

tistical studies on per capita costs in city schools; enrollment in foreign languages, sciences, and commercial subjects in public high schools; and school support and school indebtedness in cities.

With the addition of six employees to the staff of the statistical division for the work of the approaching fiscal year, the statistical work of the bureau will be put on a much more satisfactory basis. Delays have been caused not only because of insufficient number of employees to do the work in the office, but likewise by an inability to get returns from the field promptly. With the additional employees it will be possible to send some of them into the field to get data more promptly and at the same time the deficiency of the personnel in the office will be considerably relieved.

(2) Editorial Division.

Bulletins and leaflets.—A greater number of documents were issued by the Bureau of Education during the year ending June 30, 1923, than in any corresponding period of its history. It appears to be impossible to maintain a uniform rate of issue, which is undoubtedly desirable, for the conditions that govern printing vary widely from year to year. Naturally the most important factor is the amount of the congressional appropriation for printing by the Department of the Interior, with its corollary, the allotment by the Secretary of the Interior to the use of the Bureau of Education. But conditions sometimes arise to interfere with the best-laid plans and to prevent the prompt and regular delivery of printing ordered from the Public Printer, although sufficient money may be on hand to pay for it.

The record of publications for the past five years is as follows:

Fiscal year.	Bulletins.	All other documents.	Total.
1919	71	87	158
1920	62	94	156
1921	47	77	124
1922	63	52	115
1923	67	94	161
Total for 5 years	310	404	714

In the fiscal years of 1914 to 1918, inclusive, about 50 bulletins were issued annually, and the number of minor publications was relatively small, but in 1919 the bulletins rose to 71, the greatest number ever published by the Bureau of Education in one year; and the number of other publications reached 87. This sudden increase was due to the fact that the quantity of printing on account of the war suddenly dropped after the armistice, and for a short period the war-time force of the Government Printing Office was employed largely upon the work of the civil departments and many documents which had long been held in abeyance were taken up and completed. In the next year less was done for the Bureau of Education, though the number of leaflets printed was somewhat greater.

The serious effect of the shortage of paper became apparent during 1920 and the number of bulletins issued in the fiscal year of 1921 was smaller than in any other year since 1913. The bulletins reached the normal number again in 1922, but the number of other documents declined.

The large number of publications in 1923 is largely the result of the new policy of the bureau in issuing more brief documents and fewer of the bulky type. In this way a greater variety of educational matters are covered and the publications are issued more promptly. This policy has resulted in a marked increase in the number of leaflets ranging in extent from 4 to 16 pages, in the reduction in the average size of the bulletins from 76 pages in 1916 to 53 in 1923, and in the practice of first printing the bulky Biennial Survey of Education in the form of separate chapters issued as "advance sheets."

It is the present purpose to maintain a series of leaflets devoted to each of the branches of educational work represented in the bureau. The material for these leaflets is in general prepared under the direction of the several chiefs of division.

School Life.—The publication of the periodical School Life was resumed in September, 1922, in accordance with the terms of congressional Joint Resolution No. 57. Only 2,000 copies may now be printed for gratuitous distribution, and these are sent to libraries which make application for them. Additional copies, however, may be printed for "official purposes," which is construed to include exchange by which desirable material is obtained for official uses in the Bureau of Education. The principal circulation of School Life is, therefore, upon the basis of subscription at 30 cents a year. The number of paid subscribers at the close of the fiscal year was 12,159, and the average circulation during the year was about 22,000 per month.

Distribution of documents.—The Superintendent of Documents distributed during the year for the Bureau of Education 10,723 reports of the Commissioner of Education, 630,032 bulletins, 704,473 leaflets, circulars, and miscellaneous publications, 100,152 copies of School Life, and 4,916 copies of the index to that periodical, making a total of 1,450,296 documents. This number was greater by 390,199 than the number distributed in 1921–22.

Analysis of printing expenditures.—The Secretary of the Interior allotted $56,000 to the Bureau of Education for printing in the fiscal year of 1923, and at the end of the year only $263.67 remained. The following table shows the purposes for which the money was expended:

	Work completed.	Unfinished at end of the year.	Total ordered.
Higher education	$2,194.76	$861.46	$3,056.22
Rural schools	1,952.48	2,848.19	4,800.67
City schools	1,100.02	1,087.04	2,187.06
Kindergarten	419.76	294.79	714.55
Industrial education	756.95	282.67	1,039.62
Home economics	482.88	.....	482.88
Commercial education	245.00	434.73	679.73
Health education	3,000.30	1,847.53	4,847.83
Foreign education	364.24	.....	364.24
Library	2,382.65	1,624.00	4,006.65
Home education	576.97	.....	576.97
Statistics	3,970.31	3,693.48	7,663.79
Biennial Survey (vol. 1)	2,092.29	3,077.81	5,170.10
School Life	4,112.76	.....	4,112.76
General	8,046.69	5,673.88	13,720.57
Miscellaneous	1,513.72	148.21	1,661.93
Alaska	96.72	554.04	650.76
Total	33,308.50	22,427.83	55,736.33

Publications of the Bureau of Education Issued Between July 1, 1922, and June 30, 1923, Inclusive.

BULLETINS, 1921.

No. 34. Status of the rural teacher in Pennsylvania. Leroy A. King.
No. 37. Malnutrition and school feeding. John C. Gebhart.
No. 50. Engineering education after the war. Arthur M. Greene, jr.

BULLETINS, 1922.

No. 7. Report of the higher educational institutions of Arkansas. George F. Zook.
No. 8. Statistics of teachers' colleges and normal schools, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 10. Supervision of rural schools. Katherine M. Cook.
No. 11. Accredited secondary schools in the United States. George F. Zook.
No. 12. Dormitories in connection with public secondary schools. Edith A. Lathrop.
No. 14. Status of sex education in high schools. Newell W. Edson.
No. 15. A kindergarten-first-grade curriculum. By a Subcommittee of the Bureau of Education Committee of the International Kindergarten Union.
No. 16. The district owned or controlled teacher's home. J. C. Muerman.
No. 17. Statistics of city school systems, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 18. The residence of students in universities and colleges. George F. Zook.
No. 19. National conference of junior colleges. Edited by George F. Zook.
No. 20. State laws relating to education enacted in 1920 and 1921. William R. Hood.
No. 21. Record of current educational publications. Comprising publications received by the Bureau of Education to May 15, 1922.
No. 22. Statistics of kindergartens, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 23. High-school buildings and grounds. A report of the commission on the reorganization of secondary education.
No. 24. Functions and administration of school janitor service. John A. Garber.
No. 25. Higher education in Australia and New Zealand. Charles F. Thwing.
No. 26. Philanthropy in the history of American higher education. Jesse B. Sears.
No. 27. Statistics of agricultural and mechanical colleges for 1919 and 1920. Walton C. John.
No. 28. Statistics of universities, colleges, and professional schools, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 29. Statistics of State school systems, 1919–20. Florence DuBois and H. R. Bonner. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 30. Accredited higher institutions. George F. Zook.
No. 31. University summer schools. James C. Egbert. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 32. A program of education in accident prevention, with methods and results. E. George Payne.
No. 33. Record of current educational publications. Comprising publications received to September 1, 1922.
No. 34. Statistics of land-grant colleges for the year ended June 30, 1921. L. E. Blauch.
No. 35. First national conference on the work-study-play or platoon plan. Alice Barrows.
No. 36. Report of a survey of the University of Arizona.
No. 37. Statistics of public high schools, 1919–20. Advance sheets from the Biennial Survey of Education, 1918–1920.
No. 38. Educational boards and foundations. Henry R. Evans. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 39. Education in Czechoslovakia. Teresa Bach.
No. 40. Kindergarten education. Julia Wade Abbot. Advance sheets from the Biennial Survey of Education, 1920–1922.

No. 41. Education in Poland. Teresa Bach.
No. 42. Analytical survey of State courses of study for rural elementary schools. Charles M. Reinoehl.
No. 43. Some important school legislation, 1921–22. William R. Hood. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 44. The American teacher. Homer H. Seerley. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 45. Status of certain social studies in high schools. Harry H. Moore.
No. 46. Record of current educational publications. Comprising publications received to December 15, 1922.
No. 47. Federal aid to public schools. Fletcher Harper Swift.
No. 48. Some industrial art schools of Europe and their lessons for the United States. Marius Vachon. Translated by Florence N. Levy.
No. 49. Current educational publications. Index, February to December, 1921.
No. 50. Educational directory, 1922–23.

BULLETINS, 1923.

No. 1. Diagnosis and treatment of young school failures. Helen T. Woolley and Elizabeth Ferris.
No. 2. A school building program for Washington, N. C. Alice Barrows.
No. 5. Recent development of parent-teacher associations. Ellen C. Lombard. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 6. Home economics education. Henrietta W. Calvin. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 7. The educational work of the Young Men's Christian Association. William F. Hirsch. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 8. Some significant movements in city school systems. W. S. Deffenbaugh. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 9. The supervision of one-teacher schools. Maud C. Newbury.
No. 10. The public-school system of Arkansas—Part I. Digest of the general report.
No. 11. The public-school system of Arkansas—Part II. Public school finance. Fletcher Harper Swift.
No. 12. Secondary education in 1921 and 1922. W. S. Deffenbaugh. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 13. Art education, the present situation. Royal Bailey Farnum. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 14. Public education in Oklahoma.
No. 15. The Bible in the public schools; legal status and current practice. William R. Hood.
No. 16. Statistical survey of education, 1919–20. Florence DuBois. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 17. Educational surveys. E. F. Buchner. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 18. Medical education, 1920–1922. N. P. Colwell. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 19. Agricultural education. George A. Works. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 22. Educational work of the Knights of Columbus. Mark J. Sweany. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 23. The social studies in civic education. Edgar Dawson. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 24. Educational extension. Charles G. Maphis. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 25. Recent developments in educational journalism. W. Carson Ryan, jr. Advance sheets from the Biennial Survey of Education, 1920–1922.
No. 32. Record of current educational publications. Comprising publications received to May 1, 1923.

CITY SCHOOL LEAFLETS.

No. 2. The school board in city school survey reports. W. S. Deffenbaugh.
No. 3. Value of the school census. Bertha Y. Hebb.
No. 4. Per cent of municipal funds devoted to schools (1920, 1921).
No. 5. Research bureaus in city school systems. W. S. Deffenbaugh.
No. 6. Length of school sessions in grades one and two.

No. 7. State laws, school-board regulations, and judicial decisions relating to high-school fraternities. William R. Hood and Bertha Y. Hebb.
No. 8. The city school board. W. S. Deffenbaugh.

COMMERCIAL EDUCATION LEAFLETS.

No. 1. Chicago public high school course in retail selling and advertising. Mildred Robinson, Mrs. Louise Schaeffer, Glen Bentley, and Fannie Arms.
No. 2. Report of the Second Conference of Commercial Education specialists. Glen Levin Swiggett.
No. 3. Report of the First Commercial Education Dinner Conference. Glen Levin Swiggett.

HEALTH EDUCATION SERIES.

No. 7. The lunch hour at school. Katherine A. Fisher. (Reprint.)
No. 10. Suggestions for a program for health teaching in the elementary schools. J. Mace Andress and Mabel C. Bragg. (Revised.)
No. 11. Milk and our school children. Bernice C. Reaney.

HEALTH EDUCATION—MISCELLANEOUS.

Interest-arousing devices for health teaching.
Price list—Health education publications. (Revised.)

SCHOOL HEALTH STUDIES.

No. 1. Health for school children. Report of the Advisory Committee on Health Education of the National Child Health Council.
No. 2. The child health school. Lydia J. Roberts.
No. 3. Who's who in healthland. Anne Whitney.

PHYSICAL EDUCATION SERIES.

No. 1. Preparation of school grounds for play fields and athletic events. Dorothy Hutchinson.
No. 2. Athletic badge tests for boys and girls. By the Playground and Recreation Association of America.

HIGHER EDUCATION CIRCULAR.

No. 26. The Rhodes scholarships, 1923.

HOME ECONOMICS CIRCULARS.

No. 5. Government publications of interest to home economics teachers and students. (Revised March, 1923.)
No. 9. Home economics courses of study for junior high schools. (Reprint.)
No. 13. Home economics in rural schools.
No. 14. Current problems in home economics instruction and supervision. Henrietta W. Calvin.
No. 15. Self-supporting home economics departments. Henrietta W. Calvin.
No. 16. Applied science course for high-school boys.
No. 17. Higher institutions in which home economics is taught.

HOME EDUCATION CIRCULARS.

No. 2. Home education by means of reading courses and the cooperation of State and National agencies. Ellen C. Lombard.
No. 3. Parent-teacher associations. How home and school work together. Walton S. Bittner and Ellen C. Lombard.

INDUSTRIAL EDUCATION CIRCULARS.

No. 7. Higher standards for teachers of industrial subjects. William T. Bawden. (Reprint.)
No. 9. The contribution of correspondence-instruction methods to industrial education. William T. Bawden. (Reprint.)

No. 10. Helping the shop teacher through supervision. William T. Bawden. (Reprint.)
No. 11. Preparation of teachers of manual arts and industrial subjects. William T. Bawden.
No. 12. Problems of organization in industrial education. William T. Bawden.
No. 13. Public school supervision of employed boys and girls. William T. Bawden.
No. 14. Measuring the student's progress in shopwork. William T. Bawden.
No. 15. Manual arts in the junior high school. William T. Bawden.
No. 16. Studies about occupations in public schools. William T. Bawden.
No. 17. Development of plans for the preparation of teachers. William T. Bawden.

KINDERGARTEN CIRCULARS.

No. 6. The child and the kindergarten. Julia Wade Abbot. (Reprint.)
No. 9. How the kindergarten makes Americans. Earl Barnes.
No. 10. Some experiments in preschool education. (Reprint from School Life, November, 1922.) Nina C. Vandewalker.
No. 11. Kindergartens past and present. (Reprint from School Life, January, 1921.) Julia Wade Abbot.
No. 12. Suggestions concerning the application of the project method to kindergarten education. Nina C. Vandewalker.

LIBRARY LEAFLETS—LISTS OF REFERENCES.

No. 16. Rural life and culture.
No. 17. Project method in education.
No. 18. Visual education.
No. 19. Education of women in the United States.
No. 20. Junior high school.

READING COURSES.

No. 2. Great literature, ancient, medieval, and modern. (Revised.)
No. 4. Reading course for boys. (Revised.)
No. 5. Reading course for girls. (Revised.)
No. 6. Thirty books of great fiction. (Revised.)
No. 8. American literature. (Revised reprint.)
No. 11. France and her history. (Reprint.)
No. 17. Foreign trade. Glen Levin Swiggett.
No. 18. Dante.
No. 20. Teaching. George D. Strayer. (Reprint.)
No. 21. Twenty good books for parents. (Reprint.)
No. 22. Agriculture and country life. Prepared in cooperation with T. N. Carver and C. E. Ladd.
No. 23. How to know architecture. Richard F. Bach.

REPORT.

Report of the Commissioner of Education for the year ended June 30, 1922.

RURAL SCHOOL LEAFLETS.

No. 3. Modern equipment for one-teacher schools. Maud C. Newbury. (Reprint.)
No. 4. Consolidation of schools in Maine and Connecticut.
No. 5. How laws providing for distribution of State school funds affect consolidation. Edith A. Lathrop.
No. 6. A plan for the organization of a county system of agricultural instruction in elementary rural schools. Eustace E. Windes.
No. 7. State aid to weak schools. J. F. Abel.
No. 8. Essential features of laws concerning transportation of pupils. Edith A. Lathrop.
No. 9. An annotated list of official publications on consolidation of schools and transportation of pupils. J. F. Abel.
No. 10. The organization of the one-teacher school. Edith A. Lathrop.
No. 11. Objectives in elementary rural school agriculture. E. E. Windes.
No. 14. The rural-teacher situation in the United States. Mabel Carney.

STATISTICAL CIRCULARS.

No. 1. Per capita costs in city schools.
No. 2. Enrollment in foreign languages, sciences, and commercial subjects in public high schools. Florence DuBois.

TEACHERS' LEAFLETS.

No. 10. Tendencies in primary education. Florence C. Fox.

MISCELLANEOUS PUBLICATIONS.

Suggestions to authors and typists.
Modern foreign languages in training for foreign service. (Reprint, pp. 123–140, Bulletin, 1921, No. 27.)
Librarians of public and society libraries. (Reprint from Educational Directory, 1920–21, Bulletin, 1920, No. 33.)
Publications available, November, 1922.
Publications available, April, 1923.
Accredited secondary schools in Maryland.
Model platoon school developed by Akron Teachers College. W. J. Bankes. (Reprint from School Life, February, 1923, pp. 135–137.)
Broadside—American education week.
Broadside—American education week, an appeal to the Nation.

PERIODICAL.

School Life, vol. 8, Nos. 1–10, September, 1922, to June, 1923, inclusive.
School Life, index and title-page, vol. 7, September–December, 1921.

(3) Library Division.

Bibliographies, cataloguing and indexing.—The library has continued to expand by the addition of the more important new literature on educational subjects. The volumes and pamphlets acquired by gift, by exchange, and by purchase which were added during the year numbered 828; also 350 copyright transfer books from the Library of Congress were accessioned, and 6,075 numbers of serial publications.

The bibliographical and reference service was maintained as usual both for members of the bureau and for outside inquirers. A large number of letters requesting information or publications bearing on educational topics were answered. During the year the library lent 2,324 volumes to borrowers outside the office, sending many of these books to considerable distances by registered mail.

The library compiled 52 new bibliographies and revised 190 of the reference lists which were previously on file. A large number of the printed, mimeographed, and typewritten bibliographies were distributed.

In the library leaflet series, lists of references on the following subjects were issued: No. 17, Project method in education; No. 18, Visual education; No. 19, Education of women in the United States; No. 20, The junior high school. The manuscript for leaflets No. 21, Home economics, and No. 22, Secondary education in the United States, was completed and sent to the printer. The library also compiled Bulletin, 1922, No. 33 and No. 46, and 1923, No. 32, Record of current educational publications, three numbers, the last comprising publications received by the Bureau of Education to May 1, 1923. Bulletin, 1922, No. 49, Index to the Record for 1921, was also issued.

The library has prepared a questionnaire to be sent out for the purpose of collecting statistics of public, society, and school libraries, which are to be published as a bulletin of the bureau.

The new publications were catalogued and classified, and considerable progress was made in carding sections of the library previously uncatalogued, especially school and college textbooks. Cooperation in producing Library of Congress printed catalogue cards for use throughout the country was continued. A large number of volumes were also put through the bindery.

The chief of the division contributed to each of the 10 numbers of School Life throughout the year a page of notices of new educational books, with descriptive annotations. He attended, as official representative of the bureau, the annual conference of the American Library Association held at Hot Springs, Ark., April 23–28.

Home education.—The work of home education in the Bureau of Education was established in 1913 to accommodate adults who, for various reasons, are unable to continue their education in institutions. The work is intended to help parents to further their own education, to give them an understanding of child nature and child care, and to broaden their outlook regarding the needs not only of their own children but of the children of the community, the State, and the Nation.

Since parents and teachers share the responsibility of training the children in the most formative period of their lives, it is essential that these two guardians of children work together with perfect understanding. Parent-teacher associations, mothers' clubs, and reading circles have helped to bring about a fine feeling of cooperation between the school and the home. The work of home education in the bureau has included the encouragement of these organizations. It has furnished suggestions relative to a constitution, programs, etc. The work has been conducted through correspondence, circulars, bulletins, publicity articles, reading courses, and addresses.

Men and women in all occupations and professions have availed themselves of the opportunity of reading under direction. Over 16,000 readers have been enrolled for one or more of the reading courses. Twenty-three reading courses have been issued, as follows:

1. The World's Great Literary Bibles.
2. Great Literature, Ancient, Medieval, and Modern.
3. Miscellaneous Reading Course for Parents.
4. Miscellaneous Reading Course for Boys.
5. Miscellaneous Reading Course for Girls.
6. Thirty Books of Great Fiction.
7. Thirty World Heroes.
8. American Literature.
9. Thirty American Heroes.
10. American History.
11. France and Her History.
12. Heroes of American Democracy.
13. The Call of Blue Waters.
14. Iron and Steel.
15. Shipbuilding.
16. Machine Shop Work.
17. Foreign Trade.
18. Reading Course on Dante.
19. Master Builders of To-day.
20. Teaching.
21. Twenty Good Books for Parents.
22. Agriculture and Country Life.
23. How to Know Architecture.

Two of these courses were prepared and issued during the year.

Reading circles have been promoted and members enrolled for the bureau's courses. Individuals are also taking the courses without joining a circle. In California several cities have large and active reading circles in which the bureau's courses are used.

The bureau has this year prepared and issued a revised circular descriptive of one of these circles in California which is used as a basis of organization of reading circles in California and in other States.

A circular was prepared and issued containing excerpts of the discussions at the Conference on Home Education at Lexington, Ky.

For the use of parent-teacher associations a circular and a bulletin have been prepared and issued. These are: "Parent-teacher associations—how the home and school work together," and "Recent development of parent-teacher associations."

Two radio articles were prepared—one on "What a parent-teacher association can do for the school," and one on "How you can educate yourself at home." For education week, two articles of the same nature were prepared.

In conducting the home reading courses the bureau has the cooperation of State departments of public instruction and extension divisions in State universities or colleges in 16 States and Hawaii. Special collaborators are appointed to carry on the work in these States in the extension divisions of the State institutions. The bureau furnishes the plan of work and the leaflets, circulars, and stationery with which this work is carried on in cooperating States.

The director of home education prepared an address for the annual meeting of the American League of Library Commissions on "The bureau's project to promote reading habits among adults," and for a State meeting in Alabama. She addressed the Maryland Branch of the National Congress of Mothers and Parent-Teacher Associations at Baltimore, the parent-teacher association at Alexandria, Va., and the annual convention of the National Congress of Mothers and Parent-Teacher Associations at Louisville, Ky.

(4) Division of Mails and Files.

The bureau no longer undertakes to keep an exact count of the enormous number of letters and other pieces of mail handled by this division. All mimeograph material is made and distributed by this division. This consists largely of circulars of information, blanks for office records, questionnaires relating to investigations, bibliographies, material for newspapers, announcement of conferences and other important matters by the commissioner, home reading courses, and form letters. During the year all radio messages were mimeographed and sent out to the newspapers from this division.

(5) Alaska Division.

The Alaska division of the bureau, as already stated, is required to make provision for the education of the natives of Alaska, extend to them all possible medical relief, and train them for self-support and, where this is impossible, relieve destitution.

The administration of this work obviously involves great difficulties arising principally from the remoteness of most of the villages, the enormous distances between them, the meager means of communication, and the severity of the climate. The 27,000 natives are scattered along thousands of miles of coast and on the great rivers, in villages ranging from 30 or 40 to 300 or 400 persons. The work would extend to the utmost limits of the United States in terms of distance with schools in Maine, California, Georgia, and Minnesota. One of the school districts is twice the size of the State of Illinois. Many of the settlements are far beyond the limits of transportation and mail service. One-third of the natives are north of the Arctic Circle.

To make all the objectives of the bureau in Alaska anything like 100 per cent effective would require infinitely more money than is now appropriated. Educational opportunity is now provided for possibly 60 per cent of the natives, while medical relief is extended to an even less proportion. As an instance of the lack at this point, 15 per cent of the natives have tuberculosis and 8 per cent of deaths arise from this disease, but there is not a tuberculosis hospital for natives in the entire Territory.

During the year the field force in Alaska included 5 superintendents, 144 teachers, 7 physicians, 16 nurses, 3 nurses in training, 11 hospital attendants, and 4 herders in charge of the reindeer belonging to the Government. Seventy-five schools were in operation, with an enrollment of approximately 4,000. Orphanages were maintained at Kanakanak and Tyonek for the care of the children left destitute by an epidemic of influenza which prevailed in those regions a few years ago.

The work in Alaska is under the direction of the superintendent of education of natives of Alaska, with headquarters in Seattle. The Seattle office functions as a purchasing and disbursing office for the bureau's Alaskan services. It also finds teachers and other personnel. It expends or invests, as requested, funds sent to it by employees in Alaska, by cooperative stores of the natives, or by individual natives of Alaska. It also sells commodities for the natives and remits or expends the proceeds.

Education.—For purposes of supervision the Territory of Alaska has been divided into 5 school districts, each under a district superintendent, as follows: The northwestern district, including 10 schools, 1 hospital, and the reindeer herds on the shores of the Arctic Ocean and in the region tributary thereto; the Seward Peninsula district, including 11 schools and the reindeer herds on the Seward Peninsula between Bering Sea and the Arctic Ocean; the western district, including 17 schools, 1 hospital, and the reindeer herds in the region bordering Bering Sea; the central district, including 22 schools, 2 hospitals, and the reindeer herds in central Alaska and on the Aleutian Islands; and the southeastern district, including 15 schools and 1 hospital in southeastern Alaska.

Medical relief.—The bureau maintains hospitals at Juneau, Kanakanak, Akiak, Nulato, and Noorvik, which are important centers of native population in southern, western, central, and arctic Alaska. The hospitals, physicians, and nurses serve only the more thickly populated districts. In the vast outlying areas the teachers must of

necessity extend medical aid to the best of their ability. Accordingly, the teachers in settlements where the services of a physician or nurse are not available are supplied with household remedies and instructions for their use.

Inadequate as is the medical service to meet the needs of the entire native population, it has nevertheless accomplished gratifying results. During the year 1921–22, 6,403 treatments were given to 3,524 patients by physicians and at hospitals; in the villages the nurses gave 8,989 treatments to 3,977 patients; at 57 schools 19,659 treatments were given.

Reindeer industry.—Originating in 1892 in importations of reindeer from Siberia to furnish subsistence for the Eskimos in the neighborhood of Bering Strait, the reindeer industry has expanded until it has assumed chief importance in the bureau's activities in behalf of the natives. Herds are now found near all of the principal native settlements of western Alaska from the Arctic to the Pacific Ocean. So rapidly have the herds increased that the total number of reindeer in Alaska is now estimated at 300,000, of which about 200,000 are owned by the natives themselves. The reorganization of this industry is one of the main problems now confronting the bureau. In certain sections the herds have increased to such an extent that they represent little value to the natives. Steps must be taken not only as to the distribution of the herds, as in the past, but for the handling of the industry on a business basis.

The present commercial value of the Alaskan reindeer herds is approximately $7,500,000, or $300,000 more than the sum paid by the United States to Russia for the Territory. This does not take account of some 200,000 reindeer slaughtered and used in the past.

The possibilities for reindeer raising in Alaska are almost limitless, and the territory producing the reindeer moss necessary for winter grazing would probably support 4,000,000 head.

The U. S. S. "Boxer."—One of the greatest problems in connection with the work of the bureau in Alaska has been the securing of transportation of appointees and supplies from Seattle to the remoter settlements. In April, 1920, the U. S. S. *Boxer*, a wooden vessel which had been used as a training ship for naval cadets, was transferred from the Navy Department to the Interior Department for use by the bureau in connection with its work in Alaska. Funds to cover the expense of fitting the vessel for service in Alaskan waters were provided in the Interior Department appropriation act approved May 24, 1922. In April a Coast Guard cutter proceeded to Newport, R. I., and towed the *Boxer* to Norfolk, Va., to join other vessels to be towed to the Pacific coast. The *Boxer* had been out of commission for several years and this voyage disclosed the necessity for the making of repairs to the vessel before proceeding farther. Upon the completion of these repairs at the Norfolk Navy Yard, in August, the *Boxer* left Norfolk in tow of a naval tug and proceeded by way of the Panama Canal to San Diego, Calif., from which place Coast Guard vessels towed the *Boxer* to Seattle. During the winter months an engine was installed in the vessel and it was refitted for its work in northern waters. It started on its maiden trip in May of this year. It is hoped that the operation of the *Boxer*, under the direct control of the bureau, will lessen the transportation problem.

Activities of the Commissioner.

During the year the excessive demands for the services of the commissioner, prevalent in past years, continued. The commissioner was able to meet only a fractional part of the calls. His

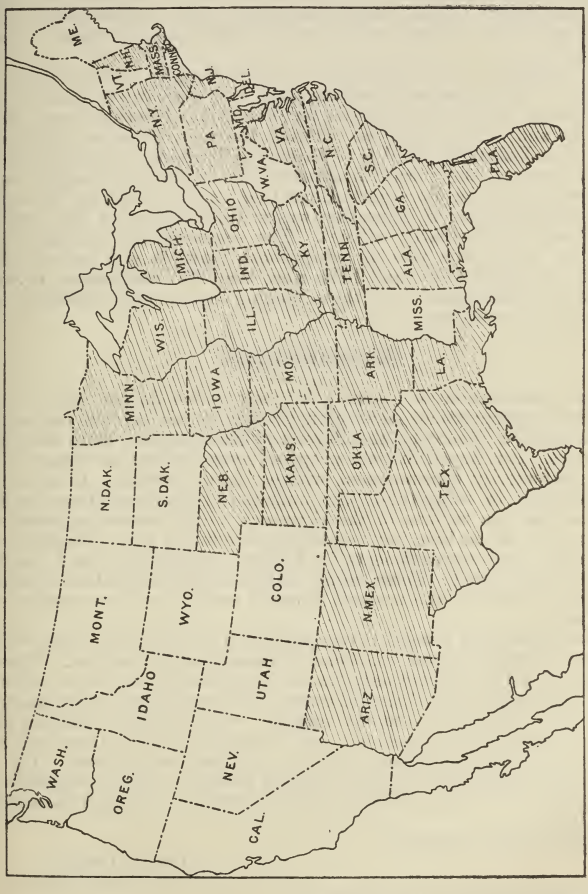


FIGURE 5.—Map showing the 30 States in which the commissioner personally has made educational addresses, visited schools, conferred with educational officials, or performed some other kind of field service during the fiscal year 1922–23.

services in the field involved 55,000 miles of travel and 193 days away from the office in Washington. He conducted four national educational conferences and made more than 200 addresses before

audiences aggregating about 150,000 persons. These addresses included 14 addresses before national organizations; 28 addresses before State organizations; 12 county organizations; 14 city educational groups; 20 institutions of higher learning; 20 business organizations (chambers of commerce, Kiwanis, Rotary, Lions, and other luncheon clubs); a considerable number of addresses at high and elementary schools, chiefly dedicatory and commencement addresses; and a large number of miscellaneous addresses. (See fig. 5.)

In addition, the commissioner visited officially 8 State departments of education, attended meetings and discharged duties as a member of the Federal Boards for Vocational Education and Maternity and Infant Hygiene. During the year, President Harding created a Federal Council for Citizenship Training with representatives from all the executive departments of the Government, the Federal Board for Vocational Education, and the Veterans' Bureau. The Commissioner of Education was made chairman of the council and has met regularly with it. The commissioner published 20 articles during the year in educational journals and periodicals, omitting duplications, and held more than 200 conferences in his office in Washington with those seeking advice and assistance in educational problems.

Recommendations.

The recommendations made previously which do not involve increased appropriations have been practically all carried out with the exception of moving the Bureau of Education to more suitable quarters. It is hoped that the proposed move in the near future will be satisfactorily consummated without further delay. It appears unnecessary to recapitulate the numerous recommendations made in the last two reports to the Secretary which require appropriations which it has been impossible to secure in the face of imperative economies and retrenchments in Federal expenditures as a result of the war period. These needs still await the arrival of a more propitious hour in the nation's financial status but are nevertheless urgent.

In Alaska there is need of reorganization of the entire work, with a great emphasis upon vocational training for the natives. These people as a rule require only the fundamentals of academic education but should have a general grasp of the meaning of government and their obligations thereto, together with thorough training in health, hygiene, and sanitation, and, above all, the vocational training that will enable them to live in a civilized environment. Likewise the medical work and the reindeer industry require reorganization, plans for both of which will be submitted during the coming fiscal year.

Respectfully submitted.

Jno. J. Tigert,
Commissioner.

The Secretary of the Interior.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1924

WASHINGTON
GOVERNMENT PRINTING OFFICE
1924

THE UNITED STATES BUREAU OF EDUCATION

Created as a Department March 2, 1867
Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 1, 1924.

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1924, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

GENERAL STATEMENT

In my last report, I gave an analysis of the organization and set forth the functions of the Bureau of Education in detail. The organization and functions have not been changed during the fiscal year and, therefore, I shall say nothing of these at this time but wish to preface my detailed report of the year's activities with some general observations.

The Bureau of Education finds itself in a more promising situation than at any time in its existence. For a number of years, due to small appropriations, inadequate housing, limited personnel, and lack of ample facilities, the future has looked uncertain and, at times, gloomy for the important service of this bureau. The past year has brightened greatly the prospect. A number of factors have entered into this situation but the most important has been the increased interest and support which the bureau has secured in the Department of the Interior, especially from the office of the Secretary. This increased interest has been due very largely to the removal of the bureau from the Pension Building into the Interior Building. The transfer in quarters has improved in a marked degree the efficiency and morale of the staff because of the superior adaptability and more attractive appearance of the space now occupied, and has distinctly improved the facilities of cooperation between this bureau and the Department of the Interior and other bureaus and offices in the department because of proximity and convenience.

I should be remiss if I did not acknowledge at the outset the improvement that has come in these various avenues converging back in the personal interest and support which the Secretary of the Interior has given so unstintedly during the year. For this I express my profound appreciation.

Likewise, I wish to take occasion to remark that the progress made in the bureau has been, in a certain sense, entirely due to the exertions of those who compose its staff. In many ways the personnel have displayed loyalty, energy, and enthusiasm not formerly in such

evidence. I wish to call attention to this and say that without it the Commissioner of Education could have accomplished little.

Even under the present conditions, the Bureau of Education can not render all the service which the States and localities are demanding because we do not have the facilities to create here such a central agency for research and investigation of educational questions as is direly needed, but we are heartened and encouraged by the progress that has been made and the better hope that the future seems to hold.

AMERICAN EDUCATION WEEK

Several years ago the Bureau of Education inaugurated the annual observance of a week to stimulate an interest in education throughout the Nation. It was designed as a great spotlight to focus the minds of the American people upon what the schools are doing and what their needs and objectives are. The next year the American Legion became interested and now the week, known as American Education Week, is sponsored conjointly by the Bureau of Education, the National Education Association, and the American Legion.

Last year unprecedented success marked the observance of the week. Thousands of reports came to the Bureau of Education from every quarter of the country describing the enthusiasm with which people of all classes responded to the appeals made to them in behalf of the schools.

Stimulated by a proclamation of unusual strength by President Coolidge and by the proclamations of the governors of the several States, the project lacked nothing of influential official support.

The Bureau of Education issued 25,000 copies of a leaflet of suggestions for the observance of the week, and 85,000 copies of a broadside sheet for the use of newspapers and various organizations. The demand for these publications was so great that the supply was exhausted some days before the beginning of education week.

State superintendents of public instruction entered heartily into the work of preparing plans and issuing circulars of information and instruction. In their turn local school superintendents, city, county, and district, cheerfully undertook the appointment of committees and the direction of the thousands of details of preparation as outlined in the bureau leaflet of suggestions.

Each successive year finds a more ready acceptance of American education week, for its value is more and more recognized. With experience a better technique is developing; earlier beginning, closer organization and more complete preparation are evident every year, and the results are correspondingly better. American education week for 1924 promises to exceed in interest that for 1923.

Technical Activities

EDUCATIONAL RESEARCH AND PROMOTION

The bureau's functions and activities include educational research and promotion. These functions and activities may be further

classified as (1) research and investigation; (2) educational surveys; (3) dissemination of information; and (4) field service.

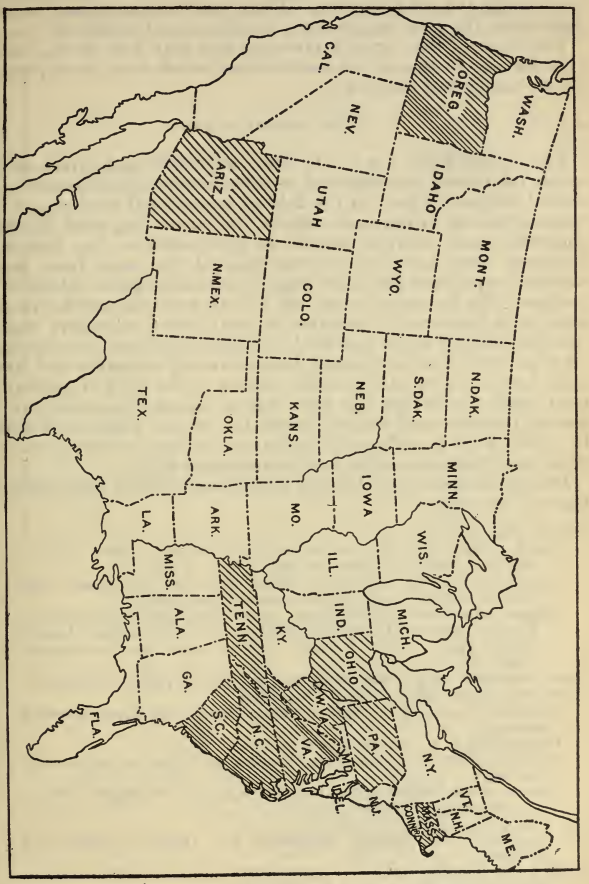


FIG. 1.—During the fiscal year 1923–24 the Bureau of Education conducted 18 surveys, in 10 States: Arizona, Massachusetts, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia

(1) Research and Investigation

The members of the technical staff of the bureau spend the greater part of their time in various forms of research. The increasing complexity of modern educational problems suggests the necessity of

constant change in administration and content of curricula to meet present-days needs. These changes in the educational system, from the kindergarten to the university, should be made only after adequate study and consideration. There can be no question, therefore, concerning the need for research in educational problems.

The scope of the bureau's investigations may best be appreciated by referring to the list of publications which have been prepared by the members of the staff.

(2) Educational Surveys

For several years one of the most important and direct services which the bureau has rendered to educational administrators in the several States has been in the field of educational surveys. As has been mentioned in previous reports, the bureau has been invited to undertake these surveys because its representatives are completely detached from any local interest and, at the same time, possess extended experience and knowledge which are of great value for this purpose. On the other hand, the bureau has been careful in these surveys to request the assistance of well-known educators who are familiar with all of the practical situations which call for discussion.

On account of the increasing demand among educators and laymen alike for studies of educational practices in the light of general and local needs the bureau has been able to respond favorably to only a small proportion of the invitations for surveys which have come to it. This work is sufficiently important so that several persons on practically full time might well be employed in it.

During the fiscal year 1923–24 educational surveys were made (see Fig. 1), as follows:

Higher education — 3
- State system of higher education, Massachusetts (field work in 1922–23; report completed in 1923–24).
- General conditions relating to higher education, Tennessee (field work in 1923–24; report to be completed in 1924–25).
- Higher education in Cleveland, Ohio, with special reference to Western Reserve University and the Case School of Applied Science (part of field work in 1923–24; report to be completed in 1924–25).

Rural education; county and other local systems of public education — 9
- Phoenix Union High School (Arizona).
- Currituck County, N. C., and Arlington County, Va. (general county surveys).
- Orangeburg, S. C. (occupational survey).
- Fairfax County, Va. (evaluation of seven and eight year elementary systems).
- Princess Anne, King William, King and Queen, Chesterfield Counties, Va. (secondary education surveys).

City schools — 6
- Swarthmore and Radnor Township, Pa. (general public-school systems).
- Alexandria, Va. (general public-school system; field work in 1922–23; report completed in 1923–24).
- Portland, Oreg.; Fairmont, W. Va.; Uniontown, Pa. (school-building surveys).

Total — 18

(3) Dissemination of Information

In connection with the field service of members of the staff and through educational surveys the bureau disseminates information on educational problems to all parts of the country. By far the greater

Fig. 2.—During the fiscal year 1923-24 twenty-three members of the staff of the Bureau of Education, exclusive of the Commissioner, rendered an aggregate of 883 days of field service of some kind (including Sundays and time spent in travel prorated) in 31 different States. Each dot represents one day of field service.

part of this work is accomplished through the bulletins and circulars which are issued from time to time. Part of these are the result of researches made by members of the staff and part are the results of

studies which have been made by persons not connected with the bureau.

Thousands of individual requests for information by letter or in person are also answered by members of the bureau's staff in the course of every fiscal year.

(4) Service in the Field

In the promotion of education the members of the bureau's staff are called upon to inspect schools and colleges, to address educational meetings and conventions, to hold conferences with educational leaders in the several fields, and to conduct educational surveys. Some of these activities are undertaken by the bureau as a means of maintaining close contact with educational conditions throughout the country, but the most of them are performed at the invitation of educational administrators in the several States.

On account of the limited travel funds of the bureau, much of the field service can be undertaken only when the expenses of travel and subsistence are paid by educational administrators and educational associations. This situation has a tendency to concentrate the field service of the bureau's staff in the eastern part of the country. However, every possible effort is being made to reach and study the problems of all parts of the Nation.

Summarizing all types of field service, I may report that during the fiscal year 23 members of the bureau staff, exclusive of the commissioner, rendered an aggregate of 883 days of field service outside of the District of Columbia in 31 different States. (See Fig. 2.)

As one feature of this service, 20 members of the staff, exclusive of the commissioner, delivered 164 addresses in 26 different States, to audiences aggregating about 41,227 persons.

ACTIVITIES OF TECHNICAL DIVISIONS

(1) Division of Higher Education

Educational surveys.—During the year the members of the division have largely been engaged in making educational surveys of higher institutions in Massachusetts, Tennessee, Georgia, and Ohio.

A comprehensive fact-finding report bearing on the need for supplementing existing facilities in higher education in Massachusetts was submitted to the State survey commission appointed by the governor on December 26, 1923. Also, the several possible methods of supplementing the State's present support of higher education, including the establishment of a State university, were discussed in some detail. After studying the fact-finding report the survey commission recommended the establishment of a State system of junior colleges. A number of well-known leaders in higher education assisted the bureau's chief of the division of higher education in making the fact-finding survey. The survey report was printed as a legislative document by the State of Massachusetts.

The State-wide survey of higher education in Tennessee is in progress. The chief of the division and three other members of a survey commission have visited nearly all of the higher institutions

in the State and gathered a considerable amount of data which is being formulated into a report. The survey was undertaken at the invitation of the Tennessee College Association.

At the invitation of the Cleveland Foundation, the chief of the division of higher education has undertaken to direct a survey of higher education in Cleveland, Ohio, with special reference to Western Reserve University and the Case School of Applied Science. The survey commission is studying the needs of the city in higher education and the possibility of developing the two institutions through some permanent cooperative arrangement.

Special studies and reports.—Other studies which have been prepared in the division and published during the year include: Statistics of land-grant colleges for the year ended June 30, 1922; survey of the State institutions of higher learning in Kansas.

In addition to the printed bulletins and pamphlets prepared or compiled by members of the division, there were the following studies, which were issued in mimeographed form: Statistics of current (1923–24) enrollments, income, expenditures, and salaries at State universities, colleges, and teacher-training institutions; enrollments in schools of engineering (1923–24).

Studies which are now in progress and will shortly be completed include: Survey of higher education in Tennessee; survey of higher education in Cleveland, Ohio; residence of college and university students; statistics of land-grant colleges, 1922–1923; decennial report on land-grant college education, 1910–1920; Federal cooperation in vocational education.

The assistant specialist in higher education has completed one-half of the survey on the curriculum of engineering schools in the United States, in cooperation with the board of coordination research of the Society for the Promotion of Engineering Education. He has also completed the compilation of basic data on standards and sources of standards in mathematics and biological sciences with respect to the bachelors' degrees in the State universities of the United States, in cooperation with the graduate department of the American University.

Educational conferences.—The division of higher education has continued its cooperation with various organizations through educational conferences, the most important of which was, perhaps, the preliminary conference of the Pan American Highway Commission. The assistant specialist in higher education cooperated with the Pan American Highway Commission in organizing and inviting to this country a group of 38 representatives of the departments of public works, financial officials, and chief highway inspectors, and other men noted in transportation circles, of Latin America to visit the United States as guests of the highway education board and to make a study of highway methods and finances in 10 typical States of the Union. Attention was also given to methods of training highway engineers in some of the leading colleges of engineering.

The assistant specialist in higher education accompanied the commission throughout its tour and assisted it in its final conferences at the Pan American Union where the program was prepared for the Pan American Highway-Motors Conference, which is to be held in

Buenos Aires in May, 1925. As a result of the discussion a program of highway educational work will be organized in each of the South American countries within the near future.

At the request of the Commissioner of Education, the assistant specialist in higher education organized the fourth Southern Conference on Negro Land-Grant College Education at Hampton Institute, Hampton, Va., March 3 to 5, inclusive, 1924. The conference at Hampton reviewed the work of the previous conferences held at Atlanta, Nashville, and Tuskegee with respect to the agricultural and home economics programs. Furthermore, it inaugurated special studies regarding academic, normal school, industrial, financial, and administrative standards for these institutions, thus completing the cycle of study outlined at the first conference held in Atlanta in 1920. The meeting was well attended by representatives from the land-grant colleges for negroes and by leading white citizens interested in negro education. It is planned in the near future to publish a digest of the proceedings of the four educational conferences on negro land-grant colleges.

Addresses have been delivered by members of the division at the following educational meetings: National Association of State Universities; American Home Economics Association; American Association of University Women; New England Association of Colleges and Secondary Schools; National Association of State High School Inspectors; National Council on the Teaching of English; Pan American Highway Commission; Hampton National Conference on Negro Land-Grant College Education; American Association of Junior Colleges; Ohio State Teachers' Association; Tennessee College Association; Tennessee State Teachers' Association; Massachusetts Schoolmasters' Club; Association of Virginia Colleges; Division of Higher Education of the Pennsylvania State Teachers' Association; and colleges in Georgia, Texas, Tennessee, and Pennsylvania.

(2) Division of Rural Education

General plan of work.—The work of the division of rural education during the fiscal year has been arranged as far as possible to permit members of the staff to specialize in definite and assigned fields of rural education. One new line of work, namely, that of the preparation of rural teachers, was established in March, 1924. This was made possible by the occurrence of a vacancy on the staff. The present organization is planned to enable the division to collect authentic information in each of the several fields, to provide for a series of publications along each of the several lines represented, and to render more effective and specialized service than has formerly been possible. In this way complete and comparable information extending over a period of years, concerning conditions and practice in rural education in the United States, will eventually be made available.

As an example of the type of work which is being developed in the division, the field of rural secondary education may be cited. In 1923 this was a new field of endeavor for the division. After a preliminary survey of the field and its needs, a series of studies was planned in cooperation with other organizations, particularly State departments of education and higher institutions, comprehending a

survey of rural secondary education in the United States. This series contemplates (1) a general study of State practice in administration and supervision, (2) a study of internal organization and curricula, (3) types of rural schools, and (4) rural secondary education in selected States. The data for the entire series have been collected and a large part is now tabulated. The study of the internal organization and curricula is complete; one unit of the series on types of rural high schools has been published. Completion of the series will present the first authentic data of the kind so far collected and published. Besides its informational value, this series should aid materially in the development of a relatively new field and directly assist school officials in the organization and development of the type of rural high school, which experience has shown to be most satisfactory. In addition to the lines of investigation which have been indicated, the assignment in this field has included during the year participation in eight surveys involving high-school problems of different kinds and the making of a number of addresses on subjects concerned with high schools and general advisory work in the secondary field.

Next year it is expected to develop in a somewhat similar way the recently established line of rural teacher preparation. Other phases of rural education in which similar development is progressing or contemplated are rural school administration and supervision, consolidation, the rural school curriculum, rural school statistics, and organization and practice in one-teacher schools.

Research studies and investigations.—The greater part of the time of the specialists in the division has been given to research and investigation. The studies in progress or completed during the year include the following subjects and have in most cases resulted in publication as circulars, leaflets, bulletins, articles in School Life, and reports to school officials, or in the preparation of information for the purpose of giving consultative suggestions and advice: Rural school supervision—methods, practice, extent of in the United States; conferences of county superintendents and supervisors—number, types, and time consumed; progress of rural education in the United States; consolidation and transportation problems; problems concerned with rural secondary education—administration, organization, and curricula; location, types of courses, and other information concerning institutions preparing rural teachers in the United States; salaries and number of teachers in rural schools; length of term in one-teacher schools; attendance in rural schools; improving schools through standardization; type studies of progressive counties.

Field work.—The division members have visited 24 different States and spent a total of approximately 220 days in the field. Broadly classified, this means 60 different trips, of which 36 were primarily for the purpose of conducting investigation, research, surveys, and cooperative projects with State departments generally; 16 were for the purpose of making addresses on the invitation and at the expense of institutions or organizations requesting this service. These include State teachers' associations, summer schools, educational conferences, and the like. The remaining eight trips were undertaken for the purpose of attending or participating in educational conferences. All sections of the United States are included in the above 24 States.

Surveys and cooperative projects.—Surveys and projects in cooperation with State and county departments of education have been completed or are in preparation in the following States: Arizona, 1; Pennsylvania, 2; South Carolina, 1; North Carolina, 2; Virginia, 8. These surveys cover one or more of the following: General administration; location of school buildings, including surveys for consolidation or for location of county and union high schools; curriculum revision; evaluation of different types of schools; organization of classes and teachers within the school or system. The above surveys have been made at the request and at the expense of school officials of the several units of organization concerned. Following the completion of these surveys reports have been or will be prepared for the school officials in charge. Abstracts are printed as bulletins when necessary or desirable. Of the above surveys four reports have been prepared or are nearing completion. At least two of the others are expected to result in printed reports.

Publications of interest in rural education.—Through its different types of publications the division aims to disseminate information in the various fields of rural education, to assist school officials in solving various problems which present themselves in the administration, support, and organization of rural schools and rural-school systems, and to promote progressive ideas and policies among rural people and for rural schools. Rural-school officers, especially teachers and superintendents, are an itinerant group of which, at the present time, a large number are without adequate training or previous experience. The division aims to be useful to the different groups of rural-school officials in accordance with and in proportion to their needs. To accomplish this end different types of publications and a variety of methods of appeal are essential. Research studies and investigations usually result in publications. Approximately 20 were prepared during the year in the division and 10 issued in the form of bulletins, leaflets, or circulars. Eighteen contributions to the bureau's monthly magazine, School Life, were prepared in the division during the year. One issue of School Life each year is devoted to rural education. A member of the staff assists the editor in the planning and preparation of this issue. For the Rural Schools News Letter, a monthly mimeographed circular sent to approximately 3,000 country newspapers, members of the division prepared approximately 75 articles of 250 words each. Members of the staff also contributed to educational and other magazines, among which are the New York State Teachers' Association Journal; the Federation News and Bulletin, published by the General Federation of Women's Clubs; the Proceedings of the American Country Life Association; the American School Board Journal; the Virginia Journal of Education; the Vocational Guidance Magazine; and the Galveston (Tex.) News.

General activities.—Considerable time has been devoted to the preparation of maps, charts, and other exhibit material showing the work of the division and of the bureau and setting forth facts concerning the status of rural education in the United States. These have been exhibited at meetings of the department of superintendence in Chicago, the National Education Association in Washington, the General Federation of Women's Clubs in Los Angeles, the League

of Women Voters at Buffalo, at conferences of county superintendents in Montana and Minnesota, and at Teachers College, Columbia University, New York City. In addition, a considerable amount of time of members of the division has been given to the preparation of special literature, bibliographies, articles for School Life, and material for use during the meeting of the National Education Association the first week in July.

All members of the staff assisted in preparing material for education week, 1923, including the preparation of a special leaflet setting forth suggestions for observation of the week by schools and a number of articles for the Broadside. Films and slides on conditions in rural education in the United States, prepared by the division, have been circulated in a number of States during the year.

Through its correspondence as well as through the preparation of circulars, leaflets, and other publications, the division serves as a clearing house of information. The correspondence covers a wide variety of subjects, including requests for information and advice on all topics concerned with rural education in different parts of the United States.

A member of the staff assisted in the organization and direction of the National Conference on Illiteracy, held by the Bureau of Education in cooperation with the American Legion, the National Education Association, and General Federation of Women's Clubs, January 11 to 14, 1924, and had charge of the preparation and distribution of the reports of results and conclusions growing out of the conference.

An exhibit of activities of interest to rural teachers, carried on by organizations located in Washington, was shown in the auditorium of the Interior Department; preparation of a program and publication of an announcement of all activities of the bureau during N.E.A. week were made in the division, and moving picture programs were shown during three days of that week under its direction and supervision.

(3) Division of City Schools

General plan of work.—The members of the city schools division have directed their efforts along the following lines:

1. Preparation of bulletins, leaflets, and circulars.
2. Field service, including:
   (*a*) School surveys.
   (*b*) Addresses.
   (*c*) Conferences.
3. Information service.
4. General, including preparation of material for American Education Week, and for the exhibit held during the meeting of the National Education Association.

Publications.—During the year the following bulletins, leaflets, and circulars were prepared by the division: "An evaluation of kindergarten-primary courses of study in teacher-training institutions"; "The kindergarten and health"; "How the kindergarten prepares children for primary work"; "A bibliography on preschool and kindergarten-primary education"; "Prefirst grade training"; "Why your child should go to kindergarten"; "Kindergarten progress, 1920–22"; a revision of the leaflet, "Organizing kinder-

gartens in a city school system"; and "How to arouse interest in kindergartens"; two reading courses for boys and girls in the elementary schools; "Bibliography on the work-study-play, or platoon, plan"; "Training teachers for platoon schools"; "Junior high schools in cities having a population of 2,500 and over"; "Appreciation of pictures"; "Organization of research bureaus"; "Salaries of teachers in certain cities"; "Teaching cost in 39 junior high schools"; "Basis for music in the work-study-play schools"; "A platoon school in Kansas City, Mo."; "Organization and administration of the duplicate school in Philadelphia, Pa."; "School survey report of Alexandria, Va."

A bulletin on nature study was nearly completed by one of the members of the division. This bulletin presents courses of study especially adapted to the various sections of the country.

Field service and surveys.—During the year the members of the division spent a total of 277 days in field work in 12 different States. This included time spent in school surveys and addresses at educational meetings. Among the addresses delivered were those at the meetings of the National Education Association; Pennsylvania school men, University of Pennsylvania; District Supervisors, University of Pennsylvania; Phi Delta Kappa, University of Pennsylvania; American Association of University Women and General Federation of Women's Clubs; International Kindergarten Union.

Investigation of work in nature study was made in some of the schools of Illinois, Indiana, Michigan, and Pennsylvania to determine what are the special requirements for this work.

Five surveys were undertaken by members of the division:

(1) A general survey of the schools of Swarthmore, Pa., was made under the direction of the chief of the division, who was assisted by two members of the city schools division, two members of the rural education division, one member of the physical education and school hygiene division, and by the specialist in home economics. The major lines of the recommendation made by the committee have been adopted.

(2) A general survey of the schools of Radnor Township, Pa., was made by the chief of the division, assisted by one member of the rural education division, and one member of the physical education and school hygiene division. A preliminary report was submitted in June. Some of the recommendations have already been adopted.

(3) At the request of the board of school directors of Portland, Oreg., the specialist in city schools conducted a school building survey for Portland. A school building program was worked out for a 15-year period, 1922–1937, divided into three five-year periods. At the request of the board the building program was worked out on both the traditional plan of school organization and on the work-study-play plan. The board unanimously voted to ask for a $5,000,000 bond issue for the five-year period on the program worked out on the work-study-play plan. On June 21, 1924, the bond issue carried by a vote of two to one.

(4) A school building program for Uniontown, Pa., was outlined by the chief of the city schools division. The report was

adopted and a bond issue of $600,000 was voted for new school buildings.

(5) A school building program was recommended by the chief of the division for Fairmont, W. Va. The report was adopted by the Board of Education. The voters of the city will be asked to approve a bond issue of $600,000 for a new high school building.

Conference on the work-study-play or platoon plan.—Under the direction of the Commissioner of Education, the specialist in city schools organized the Third National Conference on the work-study-play or platoon plan. The conference was called by the Commissioner of Education and was held in cooperation with the department of superintendence of the National Education Association, at Chicago, Ill., February 27, 1924. Those engaged in work in schools on the work-study-play or platoon plan, or those who planned to organize schools on this type of school organization, were invited to the conference. More than 500 superintendents and principals from all parts of the country attended both the afternoon and evening conferences. During the year the Commissioner of Education appointed the following national committees to make a study of different phases of the plan: Committee on building programs, chairman, Charles L. Spain, deputy superintendent of schools, Detroit, Mich.; committee on organization, chairman, Miss Rose Phillips, supervisor of platoon schools, Detroit, Mich.; committee on auditorium, chairman, John G. Rossman, assistant superintendent of schools, Gary, Ind.; committee on education of public opinion, chairman, S. O. Hartwell, superintendent of schools, St. Paul, Minn.; committee on music, chairman, Will Earhart, director of music, public schools, Pittsburgh, Pa.; committee on play, chairman, John E. Gilroy, director of physical education, Gary, Ind.; committee on special activities, chairman, Miss Elsa Ueland, president, Carson College, Flourtown, Pa.; committee on school extension activities, chairman, G. W. Swartz, director of adult education, Gary, Ind.; committee on training of teachers, chairman, W. F. Kennedy, director of platoon school, Pittsburgh, Pa.

Three committees, those on building programs, auditoriums, and organization, made full reports at the conference and the others gave preliminary reports. Each committee held a committee meeting during the week of February 25 to plan for the coming year's work. The superintendents and principals present at the conference requested that the United States Commissioner of Education call a fourth national conference to be held in February, 1925, in cooperation with the department of superintendence of the National Education Association.

Kindergarten education.—In addition to the preparation of the bulletins and leaflets previously mentioned, the specialists in kindergarten education prepared reports on kindergarten, music and drawing in two school surveys, outlines of high-school courses of study in music and drawing in connection with one of these, a report of the conference on training teachers and supervisors held in connection with the meeting of the department of superintendence for the kindergarten and first grade, and a report of the meeting of the International Kindergarten Union. Numerous articles were pre-

pared for School Life and other periodicals. A kindergarten reading course was prepared for parents. A series of mimeographed letters were sent to kindergarten teachers, training teachers, and supervisors to acquaint them with bureau publications. An addressograph list of first-grade critic teachers in teacher-training institutions was prepared.

The kindergarten specialists of the division spent 45 days in field work in six different States. They visited eight cities—three for the purpose of assisting in school surveys and the others to visit special schools and institutions. They held 195 conferences, 23 of which were with groups and others with individuals.

The kindergarten moving-picture film completed last year did good service but was lost in December. Through the cooperation of three cities a new one is in progress. The charts and lantern slides have been in almost continuous service. A new set of lantern slides is being made—one that illustrates the development of projects of different kinds.

Information.—Much of the time of the specialists was given to replying to letters requesting information and advice regarding various city school problems—junior high schools, kindergartens, evening schools, administrative problems, the platoon plan, teachers' councils, salary schedules, etc.

General.—Material for use in the observance of American education week was prepared and compiled under the direction of the chief of the division, who served as chairman of the committee representing the bureau in the campaign. This material consisted of suggestions to school superintendents and others as to the ways of observing the week, and a broadside sheet for the use of newspapers and of various cooperating agencies.

The chief of the division served as chairman of a committee to prepare an exhibit of the educational work of the Department of the Interior. This exhibit was placed in the corridor of the Interior Building and was viewed by several thousand teachers and by others.

(4) Division of Physical Education and School Hygiene

Personnel.—There have been several changes in the staff of the division during the year, but at its close it included the following: The specialist in charge of the division, two junior specialists, one part-time field agent, and one clerical assistant.

Publications.—Aside from correspondence and personal interviews in the office and other routine office work, the following publications have been prepared: Physical Education Circular; two circulars for school nurses; report of the study of municipal and school playgrounds; schoolhouse planning and construction; health promotion in a continuation school; the continuing need for teachers of child health; suggestions for rural school nurses; what every teacher should know about the physical condition of her pupils; report of two conferences on school health supervision; report of a conference of the State directors of physical education; progress and prospect in school health work; suggestions for a physical education program for small secondary schools; athletics for women. Two publications

were revised for republication. Several articles were written for School Life. A number of posters and charts have been prepared.

Field work.—Two conferences on health teaching were held and two meetings of the State directors of physical education were arranged. The reports of these conferences have been prepared for publication as stated. A number of other meetings were attended by members of the staff.

Eight addresses were delivered before meetings of teachers or students.

The division assisted in the survey of the schools of Swarthmore, Pa., of Radnor Township, Pa., and Currituck County, N. C.

There is in progress a study of the requirements and credits in physical education in colleges, the health program of open-air schools, what is being done for the health of teachers, and bulletins on posture and on the correlation of health with other subjects of the curriculum.

School buildings and grounds.—The special agent in schoolhouse construction reports that besides answering all correspondence referred to him (approximately 550 letters answered), he has made the following studies for the bureau:

A survey of Orlando, St. Augustine, a part of Lake County, including the cities of Eustis, Tavares, Mount Dora, and Leesburg, and also the city of Tampa, Fla.; Mobile, Ala., plans for high school; Indianapolis, for the State Board of Education of Indiana; Tulsa, Okla., school buildings; Greenwood, Miss., plans for new high school; Richard City, Tenn., plans for high-school building; Meridian, Miss., a survey of all of the school buildings; Chicago, Ill., Mobile high school plans. He has also worked with numerous architects on plans for proposed buildings and drawn many sketches to help country school people and other in constructing buildings without architects. He has had conferences with school boards relative to architects, and other matters relating to school hygiene and sanitation. He has also prepared a revision of the bulletin entitled, "American School Buildings."

(5) Service Division

For the purpose of administration certain members of the bureau's technical staff, whose activities touch the several levels of the educational system, have been grouped together in the service division. These activities include industrial education, commercial education, home economics education, educational legislation, and foreign education.

Industrial education.—The position of specialist in industrial education was vacant for the most of the fiscal year. However, the former specialist held at Urbana, Ill., a conference of representatives from institutions in the Mississippi Valley which are engaged in training teachers of the manual arts and industrial education. The proceedings of this conference were published later by the bureau as an industrial education circular under the title, "The preparation of teachers." The bureau published during the year manuscripts relative to the field of industrial education as follows: "Manual arts in the junior high school," by W. E. Roberts; "Suggestions on art education for elementary schools," by Jane B. Welling; "Vocational education in Geneva, Switzerland," by Elise Hatt.

Commercial education.—During the year the specialist in commercial education addressed the summer school of the Catholic University of America; the college of commerce of the University of Maryland; the Pierce School of Business Administration, Philadelphia; the Tome Institute, Port Deposit, Md.; the clubwomen of Pennsylvania, Scranton; business groups in Charleston and Columbia, S. C.; boys' high school of Charleston, S. C.; the South Carolina Teachers' Association; business men and the faculty and students of Grove City College, Grove City, Pa.; annual meeting of the Pitman Commercial Teachers of New York City; summer school of the Women's International League, Chicago; annual commencement of the Citadel, the military college of South Carolina; the annual convention of the National Association of Accredited Commercial Schools, Indianapolis; and the annual meeting of the American Council on Education.

The following conferences were organized and conducted by the specialist in commercial education: The national conference on secretarial training, Boston, October 27; the seventh and eighth of a series of regional conferences of business men and high-school teachers of business subjects and social studies, St. Paul-Minneapolis, November 2–3, St. Louis, November 23–24; the national conference of collegiate instructors of foreign service training subjects, Washington, December 26; the fourth commercial education conference in conjunction with the Vocational Education Association of the Middle West, St. Louis, January 16; the third annual commercial education conference in conjunction with the Eastern Association of the Middle West, St. Louis, January 16; the third annual commercial education conference in conjunction with the Eastern Commercial Teachers' Association, New York City, April 18; the second annual conference on foreign service training held in conjunction with the National Foreign Trade Council, Boston, June 4.

The following manuscripts were prepared by the specialist in commercial education: Proceedings of the first, second, third, fourth, and sixth, each as a separate bulletin, of the series of regional conferences, called by the Commissioner of Education and attended by business men and high-school teachers of business subjects and social studies (reports of the proceedings for the seventh and eighth conferences of this service are in preparation); secretarial training, a report of the national conference held at the College of Secretarial Science of Boston University, October 27; practices and objectives in training for foreign service, a report of the national conference on foreign-service training held December 26 in Washington; collegiate courses in foreign-service training, 1923–24, commercial education circulars Nos. 20 and 21; proceedings of the fourth commercial conference held in conjunction with the Vocational Educational Association of the Middle West; proceedings of the second commercial engineering conference, Pittsburgh, May 1–2, 1922; cooperative vocational guidance in commercial education, a report of the proceedings of the conference held at Pierce School of Business Administration, Philadelphia, April 21; proceedings of the third annual commercial education conference held in conjunction with the Eastern Commercial Teachers Association; proceedings of the second annual conference on foreign-service training held in conjunction with the National Foreign Trade Council.

Preliminary arrangements were made by the specialist in industrial education for the conduct, in cooperation with an adequate local committee, of a business education investigation-survey in the State of Indiana, the purpose of which is to collect, assemble, and interpret business data on which to base an articulated and motivated course of study in preparation for business in that State.

Home economics education.—During the year the specialist in home economics conducted two conferences in cooperation with the American Home Economics Association at its annual meetings in the following places: Chicago, Ill., July 31, 1923; New Orleans, La., January 1, 1924. The specialist planned the program and conducted the National Home Economics Conference called by the Commissioner of Education for April 21 to 24, at Washington, D. C. This conference was attended by 62 home economics supervisors of cities of 10,000 and above, by 100 home economics teachers and 100 other interested persons, representing many educational organizations. An attempt was made at this conference to interpret the rightful place of home economics in the whole educational system. The specialist in home economics also attended the conference on negro land-grant college education at Hampton Normal School and Agricultural Institute, Hampton, Va.

The specialist in home economics conducted the home economics survey of public schools in Swarthmore, Pa., and planned the course of study in home economics for the junior and senior high schools. She is also a member of the survey commission which is studying higher education in Cleveland, Ohio, with special reference to Western Reserve University and the Case School of Applied Science.

Questionnaires were sent to all of the cities in the United States of 10,000 population and above to ascertain the status of home economics in these schools. The returns from this questionnaire were compiled. Another questionnaire was sent to all county and State superintendents of the United States to obtain certain information as to the number of schools giving home economics; number of home economics teachers giving courses in child care and welfare; the family, personal hygiene, and health; food, nutrition, and clothing; number of home economics students taking such courses and the annual expenditures of home economics departments. An inventory was made of the home activities of the junior high school girls of two of the public schools of Washington, D. C. The specialist personally inspected home economics education in 20 different States.

The specialist in home economics prepared a chapter on "The relation of the humanities in home economics in the land-grant colleges," included in a compilation of papers relative to land-grant colleges, made by the division of higher education; home economics circulars, "Titles of completed research in American colleges and universities, 1918–1923"; "Sources of useful information for the teacher of home economics"; report of national conference of city supervisors in home economics, held in Washington, D. C., April, 1924; articles for American education week and School Life.

During the year the specialist addressed the following educational associations: State home economics associations of Indiana, Illinois, Connecticut, Maryland, and Massachusetts; the American Home Economics Association, New Orleans, La.; Eastern Arts Association,

Atlantic City, N. J.; and the Association of Land-Grant Colleges for Negroes, and the student body of Hampton Normal and Agricultural Institute, at Hampton, Va.; also, addressed the students of Eastern High School, Washington, D. C.; John Adams Junior High School, Cleveland, Ohio; seniors of Mississippi State College for Women, Columbus, Miss.; teachers of home economics of the public schools and of the Tennessee Coal & Iron Co., of Birmingham, Ala., and students in home economics classes at Nashville, Tenn.

The specialist in home economics served as a member of the exhibit committee to map out plans for the exhibit of the Department of the Interior for the National Education Association in Washington, June 29 to July 4, 1924; planned and supervised home economics exhibit for the National Education Association meeting; judged a State home economics essay contest; assumed the duties of president of the District Home Economics Association (Washington); and served as a member of the publicity committee of the American Home Economics Association.

Educational legislation.—During the year the specialist in school legislation prepared for publication reports of special studies and investigations, as follows: Legal provisions for high schools; important provisions of compulsory school attendance laws. Two projects begun prior to July 1, 1923, were completed and the material submitted for publication. One of these involved making a digest of all school laws passed by the legislatures of 47 States and Territories in 1923; another was a study of State laws providing for free textbooks for public-school pupils.

Special contributions to the publications of the Bureau of Education were made as follows: Three articles for use in connection with the observance of American education week; and two articles for publication in School Life. Four numbers in the series of legislative circulars were issued, giving current reports on educational measures introduced and passed in the State legislatures which met in 1924. During the year considerable special study was devoted to national laws and proposed laws relating to education.

Work in progress includes the study of State laws regulating degree-conferring institutions and assistance in the preparation of material for the observance of American education week.

Education in foreign countries.—The routine duties of the section of foreign education systems for the year 1924 have continued much the same as in former years. The subjects specifically mentioned as under consideration in former reports have continued of special interest, and still form the nucleus of a number of important studies.

The comparative study of education equivalence, or the true evaluation of primary and secondary school credits of foreign countries in the corresponding credits of the schools of this country, is one of the most difficult as well as the most important problems with which the assistant specialist in foreign education systems is confronted. The information and knowledge involved in correctly handling this subject are complex and extended. There are other individuals and committees, both national and international, working on the solution of the problem; but so far as the results are available, the Bureau of Education has carried the work further toward fruition than any other body.

The number of foreign school certificates that have been evaluated by the assistant specialist at the request of university registrars exceeds 250 for the year. These represent the most difficult certificates to be properly evaluated. The number of these requests is constantly increasing and the requirement of this nature is sure to increase rapidly in the future.

Another very important problem for the section on foreign education systems is that of obtaining common facts or comparative data from all important education systems. Many requests are received for information on foreign school statistics, revenue, etc., which can not be had for the want of available data. The type of educational information kept by different countries is not the same and can not easily be compared.

It has been a chief concern of the section during the year to obtain, through the use of consular service, by means of carefully prepared questionnaires, the type of comparative school data so much in demand by advanced educators. The work of gathering this desirable information is often discouraging, since the needed information is frequently not to be found in the ministries of education themselves. But little by little our files are becoming more complete with items and data on foreign education systems of a comparative nature.

During the year the routine duties of the assistant specialist, among other things, have called for answers to more than a thousand letters, most of which required special study and considerable research. Probably as many more requests for information on foreign education were answered by telephone or orally on personal visits to the office.

The work of the translators has been quite extensive, consisting principally of letters, certificates, diplomas, courses of study, articles, documents, school laws, etc.; varying in length from 100 to more than 15,000 words; representing Spanish, French, Italian, Portuguese, Dutch, Swedish, Norwegian, Finnish, Danish, Hungarian, German, Slovak, Czech, Bulgarian, Russian, Ukranian, Latvian, Lithuanian, modern Greek, Arabic, Armenian, Japanese, Chinese, and some others.

General Service Activities

As was set forth in my previous report, the general administration and organization of the Bureau of Education provide for two types of service, one of which is described as technical and the other general. The latter is of such a character that it relates itself in the main to the entire staff, but requires in some instances knowledge which is quite as technical as any of the technical activities of the bureau. The general service activities are administered under the direction of the chief clerk, who, by requirement of the Congress, acts as Commissioner of Education in the absence of the latter and include the following: Division of statistics, editorial division, library division, home education, division of mails and files, Alaska division, stenographic division, and the messenger service.

STATISTICAL DIVISION

Educational statistics for the year 1921–22 were prepared and published as follows: State school systems; city school systems; public

high schools; private high schools and academies; kindergartens; universities, colleges and professional schools; teachers' colleges and normal schools; schools and classes for feeble-minded and subnormal children; industrial schools for the delinquent; schools and classes for the blind; schools and classes for the deaf. One bulletin, known as a statistical survey of education, is in course of preparation. Other bulletins in preparation are: Accredited secondary schools; money value of education; housing of State departments of education; illiteracy; attendance data required by States and by the bureau; school census and age grade tables.

The chief of division served on the staff of the Portland (Oreg.) school building survey, and other members assisted in the survey of the higher educational institutions in Tennessee and the survey of the schools of Radnor Township, Pa.

This division made statistical studies for the library division, the physical education division, the rural education division, the city schools division, and the division of higher education. Conferences were held with State officials, college groups, normal school committees, statistical associations, the league of compulsory education officers, and national association of public school business officials.

Statistics are now being collected from States, cities, and institutions for the school year 1923–24.

EDITORIAL DIVISION

Bulletins and leaflets.—The Bureau of Education has been affected by the policy of economy in common with all other Government bureaus, the allotment for printing being less by $8,000 than that for the preceding year. Many manuscripts which would have been appropriate for publication have been declined, of necessity, and everything that has been printed was reduced in volume as much as possible.

Only 42 bulletins were issued in the fiscal year of 1924, the smallest number in many years. Leaflets and circulars of a few pages each, and usually in small editions, were issued in somewhat greater number than formerly, namely, 103. The cost of each of these is relatively insignificant. In the effort further to reduce costs, all bulletins of fewer than 50 pages were printed without cover, and covers were placed on few documents of any kind which contained fewer than 100 pages. Only five bulletins were issued which contained more than 100 pages each, and the average number of pages per bulletin was 49—a reduction of 4 pages from the average size of the bulletins issued in 1923.

School Life.—Only 2,000 copies of School Life are distributed gratuitously, and all of them go to libraries which apply for them. Other copies are used to procure material for the library of the bureau by exchange; and Government officers in educational work, especially in the native Alaskan school service and the Indian school service, are placed upon the subscription lists without charge. For others the price of subscription is 30 cents a year for 10 numbers. The number of paid subscribers at this rate amounted to 7,665 at the close of the fiscal year.

Specially attractive numbers were issued in May and June, by permission of the Bureau of the Budget. in recognition of the meet-

ing of the National Education Association in Washington. The May number was devoted principally to the activities of the Bureau of Education, and the June number was intended to bring before the teachers of the country the opportunities offered to them by the Department of the Interior and its several bureaus. Of each of these two special numbers 40,000 copies were printed for free distribution.

Monthly Clip Sheet.—In the effort to procure the wider publication of educational news in the daily and weekly papers, the Bureau of Education now issues regularly on the fifteenth of every month a collection of brief items, under the title "Clip Sheet." It is distributed to about 5,000 newspapers. They have been extensively used, and there is no doubt of the success of the publication.

Distribution of documents.—The Superintendent of Documents distributed during the year for the Bureau of Education 11,811 Reports of the Commissioner of Education, 448,724 bulletins, 889,493 leaflets and similar publications, 34,250 copies of the Clip Sheet, 141,648 copies of School Life, and 3,000 copies of the index to School Life. The total was 1,528,926 documents, an increase of 78,630 over the previous year. This number includes, of course, publications of previous years. The correspondence of the bureau steadily increases and the demand for its publications was greater in 1924 than ever before. The relatively small increase in the number actually distributed is the natural consequence of the curtailed printing program of the year.

Publications of the Bureau of Education, July 1, 1923, to June 30, 1924

BULLETINS, 1923

No. 3. History of the manual training school of Washington University. C. P. Coates.

No. 4. Junior high schools of Berkeley, Calif. H. B. Wilson and others.

No. 20. Recent advances in instruction in music. Will Earhart and C. N. Boyd. Advance sheets from Biennial Survey, 1920–1922.

No. 21. Specimen junior high school programs of study. W. S. Deffenbaugh.

No. 26. Educational work of the Young Women's Christian Association. National board of Y. W. C. A. Advance sheets from Biennial Survey, 1920–1922.

No. 27. Hampton Normal and Agricultural Institute. Prepared under the direction of W. C. John.

No. 28. Vocational education. W. T. Bawden. Advance sheets from Biennial Survey, 1920–1922.

No. 29. Biennial Survey of Education, 1918–1920—Statistics. (Bound.)

No. 30. An Americanization program. E. J. Irwin.

No. 31. Americanization in the United States. J. J. Mahoney. Advance sheets from Biennial Survey, 1920–1922.

No. 33. Educational hygiene. W. S. Small. Advance sheets from Biennial Survey, 1920–1922.

No. 34. Higher education, 1920–1922. G. F. Zook. Advance sheets from Biennial Survey, 1920–1922.

No. 35. List of bulletins of the Bureau of Education, 1906–1922. Edith A. Wright.

No. 36. Rural education. Katherine M. Cook. Advance sheets from Biennial Survey, 1920–1922.

No. 37. Progressive tendencies in European education. C. W. Washburne.

No. 38. Main streets of the Nation. Florence C. Fox.

No. 39. Consolidation and transportation problems. J. F. Abel.

No. 40. Survey of the State institutions of higher learning in Kansas. G. F. Zook, L. D. Coffman, A. R. Mann.

No. 41. Consolidation of schools and transportation of pupils. J. F. Abel.

No. 42. Educational research. B. T. Baldwin, assisted by Madorah Smith. Advance sheets from Biennial Survey, 1920–1922.

No. 43. Games and other devices for improving pupils' English. W. W. Charters, and H. G. Paul.
No. 44. Outline of education systems and school conditions in Latin America. G. W. A. Luckey.
No. 45. Work of the Bureau of Education for the natives of Alaska. William Hamilton. Advance sheets from Biennial Survey, 1920–1922.
No. 46. A study of distinguished high-school pupils in Iowa. Charles Deich and E. E. Jones.
No. 47. A biennial survey of public school finance in the United States, 1920–1922. F. H. Swift. Advance sheets from Biennial Survey, 1920–1922.
No. 48. Suggestions for consolidating the rural schools of Beaufort County, N. C. Katherine M. Cook and E. E. Windes.
No. 49. Statistics of State universities and State colleges for the year ended June 30, 1922. Advance sheets from Biennial Survey, 1920–1922.
No. 50. Free textbooks for public-school pupils. W. R. Hood.
No. 51. Schools and classes for the blind, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 52. Schools for the deaf, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 53. The Cooperative Education Association of Virginia. G. W. Guy.
No. 54. Record of current educational publications to October 15, 1923.
No. 56. Survey of the schools of Alexandria, Virginia.
No. 57. Educational tests. S. S. Colvin. Advance sheets from Biennial Survey, 1920–1922.
No. 58. Statistics of kindergartens 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 59. Schools and classes for feeble-minded and subnormal children, 1922. Advance sheets from Biennial Survey, 1920–1922.
No. 60. Statistics of private high schools and academies, 1921–22. Advance sheets from Biennial Survey, 1920–1922.

BULLETINS, 1924

No. 1. Educational Directory, 1924.
No. 2. Industrial schools for delinquents, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 3. An evaluation of kindergarten-primary courses in teacher training institutions. Nina C. Vandewalker.
No. 12. Secretarial training. Report of conference at Boston, October 27, 1923. G. L. Swiggett.
No. 21. Practices and objectives in training for foreign service. Report of conference at Washington, December 26, 1923. G. L. Swiggett.

CITY SCHOOL LEAFLETS

No. 9. Teaching load in 136 city high schools. C. C. Walker.
No. 10. Bibliography of the work-study-play, or platoon, plan. Alice Barrows.
No. 11. Training of teachers for platoon schools. W. J. Bankes.
No. 12. Junior high schools in cities having a population of 2,500 and over.
No. 13. Appreciation of pictures. Bertha Y. Hebb.
No. 14. Organization of research bureaus in city school systems. Elise H Martens.
No. 15. Salaries of elementary, junior high, and high school teachers in certain cities.
No. 16. Teaching costs in 39 junior high schools.

COMMERCIAL EDUCATION LEAFLETS

No. 4. College entrance credits in commercial subjects. G. L. Swiggett.
No. 5. Organization and conduct of business. G. L. Swiggett.
No. 6. Statistics relating to business education in colleges and universities, 1921–22. G. L. Swiggett.
No. 7. Commercial education—school opportunities and business needs. G. L. Swiggett.

HEALTH EDUCATION PUBLICATIONS

Health Education Series

No. 12. Sleep. Harriet Wedgwood.
No. 13. Dramatics for health teaching. Harriet Wedgwood.
No. 14. The kindergarten and health. Arnold Gesell and Julia Wade Abbot.
No. 15. Suggestions for a program for health teaching in the high school. Dorothy Hutchinson.
No. 16. The continuing need for teachers of child health. Dorothy Hutchinson and Harriet Wedgwood.
No. 5. Child health program for parent-teacher associations and women's clubs. (Revised.)

Posters

No. 4. Weight, height, age tables for boys and girls.
No. 5. Sleep.

Miscellaneous

Classroom weight record.
Interest-arousing devices for teaching health.
Price list (3 editions).

Physical Education Series

No. 3. Suggestions for a physical education program for small secondary schools. W. F. Cobb and Dorothy Hutchinson.
No. 4. Athletics for women. J. F. Rogers.

School Health Studies

No. 4. Growing healthy children. Grace T. Hallock.
No. 5. Health promotion in a continuation school. Harriet Wedgwood.
No. 6. Municipal and school playgrounds and their management. J. F. Rogers.

HIGHER EDUCATION CIRCULARS

No. 27. Need of art training in college and its application in after life. G. C. Nimmons.
No. 28. The Rhodes scholarships.

HOME EDUCATION CIRCULARS

No. 4. New order in educational cooperation. Margaretta Wills Reeve.
No. 5. Parent-teacher associations and foreign-born women. Caroline Hedger.

INDUSTRIAL EDUCATION CIRCULARS

No. 17. Development of plans for the preparation of teachers. W. T. Bawden. (Reprint.)
No. 18. Standards of eighth grade attainment in shopwork. W. T. Bawden.
No. 19. Means of improvement for teachers in service. W. T. Bawden.
No. 20. Art as a vocation. W. T. Bawden.
No. 21. Suggestions on art education for elementary schools. Jane B. Welling.

KINDERGARTEN CIRCULARS

No. 13. Pre-first-grade training. W. T. Root.
No. 14. References on pre-school and kindergarten-primary education. Nina C. Vandewalker and Harriet E. Howard.
No. 15. How the kindergarten prepares children for primary work. Mary G. Waite.
No. 16. Kindergarten progress from 1919–20 to 1921–22. Nina C. Vandewalker.
No. 2. Organizing kindergartens in city school systems. (Revised reprint.) How to arouse public interest in kindergartens. (Revised reprint.) Why your child should go to kindergarten.

LIBRARY LEAFLETS

No. 21. List of references on home economics.
No. 22. List of references on secondary education in the United States.
No. 23. Bibliography of all-year schools and vacation schools in the United States.

READING COURSES

No. 1. The world's great literary Bibles.
No. 2. Great literature, ancient, medieval, and modern.
No. 3. Reading course for parents. (2 editions.)
No. 4. Reading course for boys. (2 editions.)
No. 5. Reading course for girls. (2 editions.)
No. 6. Thirty books of great fiction.
No. 7. Thirty world heroes.
No. 8. American literature.
No. 9. Thirty American heroes.
No. 10. American history course.
No. 17. Foreign trade.
No. 19. Master builders of to-day.
No. 20. Teaching.
No. 21. Twenty good books for parents.
No. 22. Agriculture and country life.
No. 24. Citizenship and government. (2 editions.)
No. 25. Pathways to health. (2 editions.)
No. 26. Sixty selected stories for boys and girls.
No 27. Poetical literature for boys and girls.

RURAL SCHOOL LEAFLETS

No. 12. Consolidation of schools in Randolph County, Ind. O. H. Greist.
No. 13. The consolidated schools of Weld County, Colo. C. G. Sargent.
No. 15. Educational progress and the parents. O. C. Brim.
No. 16. The Iowa plan of observation and practice teaching in the training of rural teachers. Anna D. Cordts.
No. 17. The Iowa plan of training superintendents and teachers for consolidated schools. Macy Campbell.
No. 18. Principles of kindergarten-primary education in the consolidated rural school. Katherine M. Cook.
No. 19. Consolidation of schools and transportation of pupils in Lafayette Parish, La. J. W. Faulk.
No. 20. Gifts of nations, a pageant for rural schools. Maud C. Newbury.
No. 21. Taxpaying as a lesson in citizenship. Macy Campbell.
No. 22. The consolidated schools of Bernalillo County, N. Mex. A. Montoya.
No. 23. Training courses in consolidation of schools and transportation of pupils. J. F. Abel.
No. 24. Salaries of country teachers in 1923. Alex Summers.

REPORT

Report of the Commissioner of Education for the year ended June 30, 1923.

MISCELLANEOUS

Suggestions for the observance of American education week, November 18–24, 1923.
Broadside—American education week.
Publications available, September, 1923.
Publications available, February, 1924.
Publications available, May, 1924.
Community Score Card.

CLIP SHEET

December, 1923, to June, 1924, inclusive (monthly).

PERIODICAL

School Life, Vol. 9, Nos. 1–10, September, 1923, to June, 1924, inclusive.
School Life, index and title page, vol. 8, September, 1922, to June, 1923.

LIBRARY DIVISION

The growth of the library has continued by the addition of current educational publications. The volumes and pamphlets acquired by gift, by exchange, and by purchase during the year numbered 725; also 336 volumes of copyright transfers from the Library of Congress and 5,000 numbers of serial publications.

The printed, mimeographed, and typewritten bibliographies continued in demand, and a large number of them were distributed. The most extensively used lists of references were constantly revised and brought up to date to the number of 176 subjects, and 45 entirely new bibliographies were compiled. During the year three lists of references in the library leaflet series were issued—No. 21, Home economics; No. 22, Secondary education in the United States; and No. 23, Bibliography of all-year schools and vacation schools, by Florence S. Webb. Two others were completed and turned in for printing—No. 24, Money value of education; and No. 25, Vocational education. Two additional leaflets on Rural life and culture and Junior high schools have been completed in manuscript form in readiness for printing at an early date. The Record of current educational publications received to June 1, 1924, was also prepared and sent to the printer.

The library has had numerous calls for its reference service from outside visitors and borrowers. In a number of cases research workers were supplied with books and source material which apparently could not be obtained elsewhere. During the year there were lent to borrowers outside the office 1,567 volumes.

The chief of the division contributed to each of the 10 numbers of School Life a page of notices of new educational books, with descriptive annotations.

The data in the statistical reports received from public, society, and school libraries for 1923, in reply to the questionnaire forms sent out, have been tabulated by the statistical division, and the material now awaits editing and completing for printing.

The library prepared an exhibit of its bibliographical and reference work for inclusion in the educational exhibit on display in the Interior Department building during the 1924 meeting of the National Education Association in Washington.

HOME EDUCATION

There are now 27 reading courses available, four of which were issued during the year, namely, No. 24, Citizenship and Government, by George F. Zook; No. 25, Pathways to Health, by Harriet Wedgwood; No. 26, Sixty Selected Stories for Boys and Girls, by Florence C. Fox; and No. 27, Poetical Literature for Boys and Girls, by Florence C. Fox. A reading course on Kindergarten Ideals in Home and School has been prepared by Nina C. Vandewalker.

During the year more than a thousand readers enrolled for one or more of the courses and over 50 certificates were issued. Since the inception of this work, more than 17,000 readers have enrolled in the courses and more than 700 readers have received certificates.

Besides the reading courses, three publications have been issued for this work: "New Order of Educational Cooperation," by Mar-

garetta Willis Reeve; "Parent-Teacher Associations and Foreign-Born Women," by Caroline Hedger, M. D.; and a revised circular letter on "A Representative Reading Circle and its Method."

Exhibits of material relating to home education have been prepared and exhibited at the National Congress of Parents and Teachers at St. Paul, at the American Library Association at Saratoga Springs, at the meeting of the National Education Association, and at State meetings of parent-teacher associations.

The director of home education addressed six regional meetings of the Michigan State Teachers' Association, a junior high school parent-teacher association in the District of Columbia, and the annual meeting of the National Congress of Parents and Teachers.

The second national conference on home education was called by the Commissioner of Education at the University of Minnesota. To this conference were invited State, city, and county librarians, extension directors in State universities, and leaders in parent-teacher associations.

DIVISION OF MAILS AND FILES

The bureau has abandoned its former practice of enumerating the vast number of letters and other pieces of mail handled in the division of mails and files. Mimeograph material is now handled by the department. This includes circulars of information, blanks for office records, questionnaires, bibliographies, announcement of conferences and other important matters by the commissioner, and form letters.

This division occupies the full time of two persons and part time of one person.

ALASKA DIVISION

Plan of reorganization.—The Commissioner of Education, as a member of President Harding's party, visited Alaska last summer and studied the activities of the Bureau of Education in the Territory. This visit impressed upon the commissioner the following thoughts: First, the need of closer and more adequate supervision of the bureau's work in Alaska; second, the necessity of reorganizing the reindeer industry so as to take care of the problems of grazing, surplus deer, and other matters vital to the future development of this important industry; third, the desirability of a course of study in the schools for the natives of Alaska which would minister more nearly to their needs. The natives of Alaska have a peculiar deftness of the hand which has made them weavers, carvers, and skillful craftsmen. The program of the Bureau of Education should provide for vocational education so as to preserve and promote these native crafts and talents.

In order to provide more adequate supervision, it was suggested that the Alaska work might be directed from some point in Alaska rather than through the office in Seattle. Careful study was given to the possibility of moving the Seattle office to Juneau, Anchorage, or some other Alaskan point, but this proved utterly impracticable. The Seattle office is primarily an office for the purchase of supplies and the employing of teachers and other personnel. The supplies can not be secured in the Territory of Alaska, and there is no teacher-

training institution there. It is, therefore, necessary to purchase supplies and employ teachers in the States. The work of the teacher in Alaska is quite different from that of a teacher in a school in the States. The teacher must be a community leader and do many things not ordinarily considered within the scope of the teacher's function. This makes it necessary to interview and personally confer with those going into our Alaskan service.

As a result of these conclusions, it was decided to move the superintendent of education for the natives of Alaska to Anchorage, where he might get a first-hand contact with our problems. Furthermore, W. T. Lopp, the present superintendent, has an intimate knowledge of the reindeer industry and seemed better qualified than any one else to make recommendations for the improvement and reorganization of the reindeer industry. Accordingly, Mr. Lopp was moved to Anchorage, with duties of a supervisory nature. At the request of the commissioner, the Secretary of the Interior created the position of chief of the Alaska division, Bureau of Education, whose duties are confined to the direction of the Seattle office and a general administration of the work in the Territory. Mr. Jonathan H. Wagner, former State superintendent of public instruction in New Mexico, was appointed to this position.

With these changes, we have begun to attack the problems outlined above. A beginning has been made in several places for industrial education which will meet the vocational needs of the natives of Alaska. A course of study is in preparation and will be put into use at an early date. Industrial schools are in process of erection at Eklutna, Kanakanak, and White Mountain. In addition, the U. S. S. *Boxer* was used as a floating industrial school in southeastern Alaska during the winter.

The Alaska division of the Bureau of Education is required to make provision for the education of the natives of Alaska and extend to them all possible medical relief, train them in the industries, and so far as possible relieve worthy cases of destitution. The work in Alaska is under the direct supervision of the chief of the Alaska division, with headquarters in Seattle. The Seattle office functions as a purchasing and disbursing agent for all the bureau's activities in Alaska. It selects teachers and other personnel to recommend to the Commissioner of Education for appointment; it expends or invests, under the direction of the interested parties, funds sent to it by employees in Alaska, by the cooperative stores of the natives, or by individual natives of Alaska; it also sells commodities, such as furs, ivory, and fish, for the natives and remits, deposits, or expends the proceeds as directed.

The administration of this work involves great difficulties, arising principally from the remoteness of most of the villages, the enormous distances between them, the meager means of communication, and the severity of the climate in many sections. Most of the natives are a seafaring people, scattered along thousands of miles of coast and on the great rivers, in the villages ranging from 30 to 40 or 300 to 500 in population. The work would extend to the utmost limits of the United States, in terms of distance, with schools in Maine, California, Georgia, and Minnesota. One of the school districts is twice the size of the State of Illinois. Many of the settlements are far beyond the limits of transportation and regular mail service, and

one-third of the native population is north of the Arctic Circle. During the last school year for which statistics have been assembled educational opportunity was provided for about 44 per cent of the natives, while medical relief was extended to an even less per cent of the population.

Education.—During the fiscal year for which the following statistics will apply, 83 schools were operated in Alaska, with 151 teachers employed, including schoolroom teachers, superintendents, and principals. These teachers not only carried on educational activities but in many cases were responsible for the relief of destitution, medical supervision in the area about the station, and supervision of the industries, including the reindeer. Including school buildings, teacherages, hospitals, and orphanages, there are in Alaska 116 Government buildings in this service, valued at $273,550, not counting the equipment, school supplies, and other miscellaneous property, such as lighting plants and radio stations in a few villages, U. S. S. *Boxer*, gas boats, etc., used in carrying out the Government programs. The educational statistics for the school year ending June 30, 1924, are as follows:

Total number of days in actual attendance	367,395.84
Total number of pupils enrolled during year	3,910
Average daily attendance throughout the year	2,652
Percentage of attendance	67.7
Average number in each schoolroom each day	26.9
Number of schools open 180 days per year or more	5
Number of schools open 160 days or more, but less than 180 days	16
Number of schools open 140 days or more, but less than 160 days	34
Number of schools open 120 days or more, but less than 140 days	15
Number of schools open 100 days or more, but less than 120 days	18
Number of schools open 80 days or more, but less than 100 days	4
Number of schools open less than 80 days	9
Total schoolrooms open	101
Average number of days in the school year	135.12
Cost of school per day per child, based on actual attendance	$0.70
Cost of school per year per child, based on actual attendance	$97.65
Cost of school per year per child, based on total enrollment	$66.23
During the year there was spent for repairs on the school buildings and not counted as a part of the operation of the schools	$7,193.23
Spent for new buildings	$8,153.33

Medical relief.—For the medical service the Government, through the Alaska division of the Bureau of Education, paid out the past fiscal year, a total of $89,987.15, which covered the following service:

Patients or cases handled through the five hospitals	9,559
At a per patient or case cost of	$9.41
Total treatments, outside and clinic	24,433
Days of hospital care	14,156

As indicated above, each teacher not only teaches the school but is a dispensing agent of the medical chest, a teacher of sanitation and health, and a village sanitary engineer. From the summaries made from the reports submitted by the 101 schoolroom teachers in the Alaska service the past year, the following welfare services were rendered:—

Number of teachers' visits to homes	14,137
Number of times medical assistance was rendered to the natives by teachers	17,709
Number of births reported in villages under the Alaska service outside of hospitals	391
Number of deaths reported during the same period outside of hospitals	324

In this connection it must be remembered that the appropriation made by Congress is not large enough for the Bureau of Education to attempt to cover the entire field in Alaska with its educational program, medical and reindeer service. The total native population, according to the 1920 census, was 25,508, and the total population served in the 75 villages last year was 11,158. It is evident that the field in which the Government might extend its beneficial influence is large.

Reindeer industry.—Originating in 1892 in importation of reindeer from Siberia to furnish subsistence for the Eskimos in the neighborhood of Bering Strait, the reindeer industry has expanded until it has assumed chief importance in the bureau's industrial activities in behalf of the natives. Herds are now found near all of the principal native settlements of western Alaska from the Arctic to the Pacific Ocean, in the interior near Mount McKinley National Park, along the Alaskan Railroad, and on Kodiak Island off the Gulf of Alaska, along the Alaska Peninsula and as far west as the Aleutian Islands. So rapidly have the herds increased that the total number of reindeer in Alaska is now estimated at 350,000, of which about 235,000 are owned by the natives themselves. One of the principal problems confronting the Bureau of Education at this time is the reorganization of the reindeer industry on a cooperative basis so as to make it possible to handle more efficiently the increasing herds and market the surplus meat. This reorganization will attempt to care not only for the distribution of the herds as in the past but for handling the industry on a business basis. The present commercial value of Alaskan reindeer herds is approximately $8,750,000, $1,550,000 more than the sum paid for the territory by the United States in 1867. This does not take any account of more than 200,000 reindeer slaughtered in the past and used as meat by the natives nor the great benefit derived by the natives through participation in this great industrial success.

U. S. S. "Boxer".—In April, 1920, the U. S. S. *Boxer*, a wooden vessel, used by the Government as a training ship for naval cadets, was transferred to the Interior Department for the use of the Alaska division in connection with its work in Alaska. Funds have been appropriated and used to make repairs and remodel this schooner and equip it with modern machinery at a cost of approximately $100,000, and she is to-day a sturdy craft, braving the waters of the Pacific and Arctic Oceans as far north as Point Barrow. Annually she carries a heavy tonnage of supplies and equipment, teachers, doctors, and nurses to the coast stations and to the distributing points on the mouths of large rivers. When transportation is closed in the North she serves as a floating school. The first expedition of the kind ever undertaken was made the past winter in a four-month cruise to points in southeastern Alaska. She carried on board natives of Alaska with ship's officers and special instructors, with equipment to teach units of work that would afford opportunities to the native boys for the acquisition of new knowledge and the development of manipulative and managerial skill. Such courses were offered as navigation, with special training covering the operation and care of Diesel engines, dynamos, and marine machinery; radio telegraphy, or wireless, including practice work in installation of

wireless receiving and sending sets; cooking, with instructions and practice in the preparation of a proper marine menu; general elementary subjects, with special emphasis in speaking and writing English; history, including civil governments; personal hygiene, and physical training; lectures on such virtues as cleanliness, morality, courage, dependability, and politeness.

Industrial education.—In the ordinary day schools for the natives in Alaska industrial education supplements the fundamental work of the schools. The study of animal husbandry, home economics, and manual training helps to connect the home life and the life of the community with the school, adds interest to the academic subjects, and makes skilled and efficient citizens. Any industrial subject properly taught is highly cultural. Special industrial schools are in the process of organization at Eklutna, Kanakanak, and White Mountain, where the Government has made appropriations and buildings have been erected and teachers, specially qualified, sent in to develop industrial courses along the lines of animal husbandry, fishing, ivory industry, boat building, tanning, tailoring, commercial work, carpentry, household management and home-making, nursing and sanitation, art, music, and physical education.

Activities of the Commissioner

During the year the commissioner traveled 58,140 miles; spent 173 days in the field, including Sundays; conducted four national educational conferences, and in collaboration with the General Federation of Women's Clubs, the National Education Association, and the American Legion, conducted a national illiteracy conference; addressed 16 national associations, 4 regional associations, and 19 State associations; visited officially 3 State departments of education; addressed several city and county educational associations; visited and addressed 17 institutions of higher learning and 13 summer schools; made 9 commencement addresses, 3 dedicatory addresses, and represented the Government on one inaugural occasion; addressed 4 high schools, and 10 business organizations (chambers of commerce, Rotary, Kiwanis, and other clubs), making a total of 150 addresses before audiences aggregating 91,459. (See Fig. 3.)

In addition, the commissioner attended meetings and discharged duties as a member of the Federal Boards for Vocational Education and Maternity and Infant Hygiene, and as chairman of the Federal Council for Citizenship Training, which board was created by order of the President. He also served as chairman of the committee on closer correlation of the work of Federal agencies for the President's conference on outdoor recreation.

He wrote 35 articles and held about 300 conferences in his office in Washington with those seeking advice and assistance in educational matters.

Recommendations

A former recommendation requested the removal of the Bureau of Education from the Pension Building to more suitable quarters, and this has been carried out with greatly increased efficiency and

improvement in the morale of the bureau, as already mentioned in this report.

The commissioner has pointed out in previous reports the need for an enlargement of the Bureau of Education so that it can be

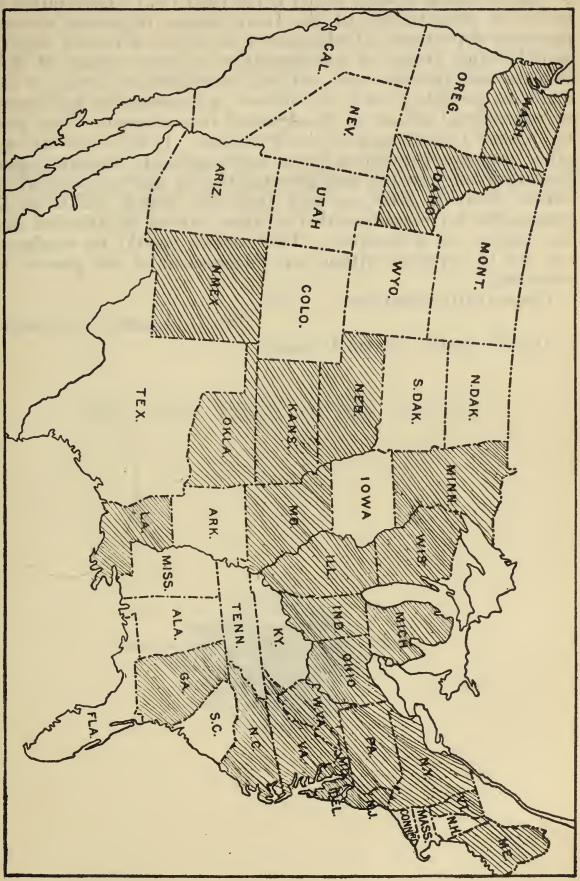


FIG. 3.—Map showing the States in which the Commissioner of Education personally has made educational addresses, visited schools, conferred with educational officials, or performed some other kind of field service during the fiscal year 1923–24. The commissioner also visited Alaska with President Harding. During the year the commissioner traveled 58,140 miles

made an adequate agency for research and investigation in such important fields as curriculum organization, school finance, buildings and construction, adult education (including Americanization and illiteracy), teacher training, secondary education, and other

lines. These recommendations are dependent, of course, upon more adequate appropriations. It appears unnecessary to recapitulate in detail these suggestions made in previous reports. There are pending before the Congress a number of bills intended to take care of this situation, among which is the plan for reorganization of the executive departments of the Government, including within it a proposed department of education and relief. This new department would bring about an amalgamation of more than 10 different bureaus and agencies now carrying on education wholly or in part, and thus provide for a more efficient and economical administration of educational affairs in the Federal Government. This plan has the hearty indorsement of the President. If this measure or some other measure providing for a more adequate Federal agency in education for research and investigation is not enacted in the near future, there is great demand from the States and those locally responsible for education that a larger service be afforded them by the Bureau of Education. This service should be rendered, but can not be expected without an enlargement of our present appropriations.

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1925

WASHINGTON
GOVERNMENT PRINTING OFFICE
1925

THE BUREAU OF EDUCATION

Created as a Department March 2, 1867
Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.,
March 14, 1867, to March 15, 1870.

JOHN EATON, PH. D., LL. D.,
March 16, 1870, to August 5, 1886.

NATHANIEL H. R. DAWSON, L. H. D.,
August 6, 1886, to September 3, 1889.

WILLIAM T. HARRIS, PH. D., LL. D.,
September 12, 1889, to June 30, 1906.

ELMER ELLSWORTH BROWN, PH. D., LL. D.,
July 1, 1906, to June 30, 1911.

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.,
July 8, 1911, to June 1, 1921.

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.,
June 2, 1921, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 1, 1925.

SIR: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1925, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 3, 1867.

PRESENT STATUS AND OUTLOOK

In my last report I had occasion to forecast a larger opportunity and brighter prospect for the Bureau of Education. These anticipations are being realized in evident ways. The housing of the Bureau of Education in the Interior building has increased the efficiency of the staff, elevated the morale, and made the bureau an integral part of the Department of the Interior in policy and in effort. The reclassification act has been of great benefit in improving the spirit of the staff and in making possible a higher quality of personnel. This latter applies with peculiar force to the personnel in the technical and research activities. Previous to reclassification the maximum salaries would not attract or hold persons capable of doing original work of a high grade. Since the passage of the reclassification act it has been possible to begin the placing of the work of the bureau on a better basis and to undertake more investigations of a research character. The Personnel Classification Board has been considerate in permitting a number of the educationists on the technical staff to be graded in higher positions, so that persons of considerably greater ability are now being attracted to these positions. During the year we have been successful in inaugurating a program which will enable us to do more and better work with a smaller number of persons.

The space provided for the Bureau of Education in the Interior building does not permit of transferring the entire library at the present time, nor is the bureau yet able to undertake research in a number of important fields of education, for which the need is urgent, but our progress has been gratifying. I wish to express again my gratitude for the continued interest, support, and advice of the Secretary of the Interior, which has been an indispensable element in the progress that we have made. Likewise, I should be remiss if I did not acknowledge that the Commissioner of Education has enjoyed a continually increasing cooperation from all the staff, to which, of course, belongs most of the credit for our accomplishments.

Technical Activities

EDUCATIONAL RESEARCH AND PROMOTION

The functions and activities of the technical staff of the bureau fall into several classes, as follows: (1) Research and investigation; (2) educational surveys; (3) dissemination of information; and (4) field service.

(1) Research and Investigation

As has been stated in previous reports, the greater part of the time of the bureau's specialists is spent in research and investigation into educational conditions. The necessity for modifying educational curricula and administration on the basis of established facts, rather than on clashing opinions, is becoming more apparent each year. Both educators and laymen are agreed that modifications of educational policy will not be permanent or economical unless based on scientific information. This conclusion enhances the opportunity of the Bureau of Education to be the chief constructive force in the country in bringing together information on the basis of which educational policies may be formulated and expressed.

The character and extent of the bureau's studies cover many subjects in education. When considered over a series of years they are doubtless more comprehensive than those undertaken by any other organization engaged in educational research.

(2) Educational Surveys

Surveys of educational conditions in particular institutions, localities, counties, and States afford an excellent opportunity for members of the bureau's staff to come in close contact with actual educational conditions. At the same time they enable the bureau to render direct and specific assistance as well as general service. The work of the bureau in this field has been greatly appreciated by educational officials, and the demand for this type of service has always been much greater than the bureau has been able to render. It would be highly desirable if the bureau could increase the number of specialists available for survey work.

During the fiscal year 1924–25 educational surveys were made (see fig. 1), as follows:

Higher education 4
- Tennessee (general conditions relating to higher education; field work in 1923–24; report completed in 1924–25).
- Cleveland, Ohio (higher education, with special reference to Western Reserve University and The Case School of Applied Science; part of field work in 1923–24; field work and report completed in 1924–25).
- Berea College, Ky. (internal administration).
- Russell Sage College and Emma Willard School, Troy, N. Y. (relations of two institutions with view to correlation).

Rural education (county and other local systems of education) 8
- Falls Church and Herndon (Fairfax County), Va. (elementary and secondary education survey; part of field work in 1923–24; continued in 1924–25).
- Arlington County, Va. (elementary and secondary education survey; part of field work in 1923–24; continued in 1924–25).
- Prince William, Prince George, Brunswick, Dinwiddie Counties, Va. (secondary education surveys).
- Charlottesville and Hopewell, Va. (secondary education).

City schools 6

Radnor Township, Pa. (general public-school system; field work in 1923–24; report completed in 1924–25).
Charlottesville and Hopewell, Va. (general public-school systems).
Fairmont, W. Va. (school-building survey; part of field work in 1923–24; completed in 1924–25).
Martinsburg, W. Va. (school-building survey).
Portland, Oreg. (school-building survey; field work in 1923–24; report completed in 1924–25).

Total 18

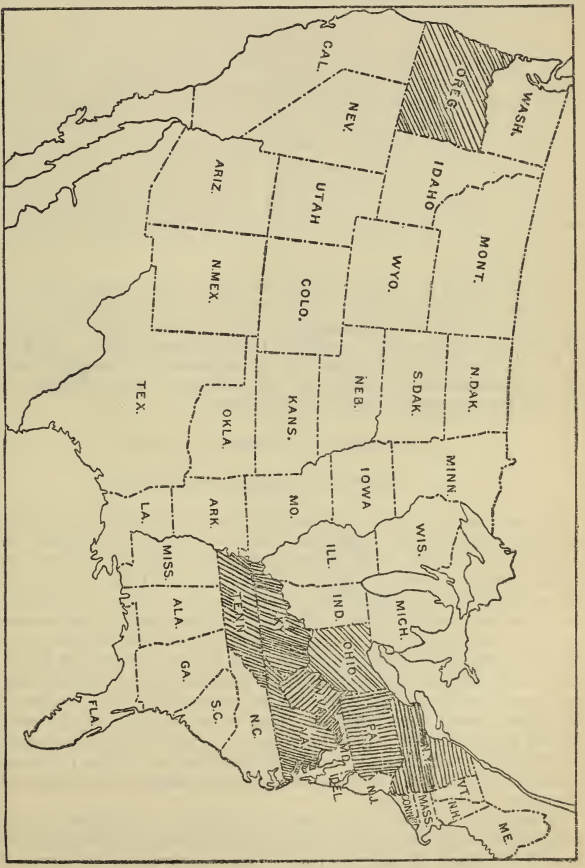


FIG. 1.—During the fiscal year 1924–25 the Bureau of Education conducted 18 surveys in 8 States: Kentucky, New York, Ohio, Oregon, Pennsylvania, Tennessee, Virginia, and West Virginia

(3) Dissemination of Information

The results of the bureau's studies are made available to school and college administrators and teachers in a variety of ways, including especially bulletins and circulars, which are distributed as soon as they come from the press. At the same time, the members of the bureau, in public addresses or by correspondence, use every opportunity to inform the public on educational matters. In this way many thousands of people are served each year.

(4) Field Service

In the conduct of surveys, members of the bureau's staff have occasion to visit widely separated parts of the country. These studies often require extended absence in the field. At the same time, the bureau's specialists conduct frequent educational conferences in various parts of the country. Also, they are called upon, from time to time, to deliver addresses before educational associations, student assemblies, and public gatherings. A large proportion of the travel expenses incident to this service in the field are borne by local, State and National organizations. The bureau is anxious to render these various forms of field service to all sections of the country on an equal basis.

Summarizing all types of field service, I may report that during the fiscal year 20 members of the bureau staff, exclusive of the commissioner, rendered an aggregate of 616 days of field service outside of the District of Columbia in 32 different States. (See fig. 2.)

As one feature of this service, 17 members of the staff, exclusive of the commissioner, delivered 185 addresses in 30 different States to audiences aggregating 45,255 persons.

ACTIVITIES OF TECHNICAL DIVISIONS

(1) Division of Higher Education

Educational surveys.—During the year the chief of the division has been engaged in making surveys of higher educational institutions in Ohio, New York, Tennessee, and Kentucky. The most important of these studies was made in Cleveland, Ohio, where a number of prominent educators from outside the bureau operated with the chief of the division. The survey commission recommended a plan providing for the permanent cooperation of the Case School of Applied Science and Western Reserve University, as the basis for a large and comprehensive university which should be located, in part, on a new campus. It was also recommended that evening-school facilities should be expanded. The findings in the report were presented at a series of public luncheons. Since that time considerable progress has been made toward the organization of the proposed university. The report of the survey commission was printed by the Cleveland Foundation.

A tentative draft of the report of a survey of higher education in Tennessee was presented at the annual meeting of the Tennessee College Association in April, 1925. The report called attention to the low proportion of Tennessee's population in college, the inadequate

financial support from a State which has considerable wealth, the lack of cooperation between and among colleges conducted under the auspices of the same church denomination, low rates of tuition, inadequate preparation of the faculties at a number of institutions, and

FIG. 2.—During the fiscal year 1924–25 twenty members of the staff of the Bureau of Education, exclusive of the Commissioner, rendered an aggregate of 616 days of field service of some kind (including Sundays and time spent in travel prorated) in 22 different States. Each dot represents one day of field service

the small attendance of students from counties difficult of access. Appropriate recommendations looking to greater student attendance, increased financial report, and higher standards of collegiate education were included in the report.

Studies at Berea College, in Kentucky, and Russell Sage College, in New York, resulted in certain recommendations for the reorganization of the internal administration of these two institutions.

Special studies and reports.—During the year the bureau published the first four parts of a comprehensive review of the work of the land-grant colleges for the decade from 1910 to 1920, as follows: History and Educational Objectives; Liberal Arts and Sciences, including miscellaneous subjects and activities; Agriculture; Engineering and Mechanic Arts; and Home Economics. This survey consists of a large number of articles contributed by specialists in the various fields of land-grant college education. It was compiled and edited by the assistant specialist in higher education. Other studies which have been prepared in the division and are ready for publication include: Statistics of Land-Grant Colleges for the Year Ended June 30, 1924.

In addition to the printed bulletins prepared in the division, the following studies were compiled and distributed in mimeographed form: Statistics of current (1924–25) enrollments, income, salaries, and student fees at State universities, colleges, and teacher-training institutions; enrollments in schools of engineering (1924–25); a preliminary report on engineering curricula, summarizing and analyzing the requirements for admission and for graduation in 25 typical engineering schools.

There are several special investigations which are now nearing completion. Chief among these is a study of the residence and migration of university and college students and a study of engineering curricula. The first not only shows the number of students residing in each State and the degree to which they migrate to other States for an education, but the information is classified according to the sex of students and the courses of study which they are following. The study of engineering curricula is a careful, quantitative analysis of the several types of subjects which are comprised in the various engineering curricula. The information is shown for public and private institutions respectively.

Several studies of standards and sources of standards for bachelors' degrees have also been completed in cooperation with graduate students or members of the faculty of the American University, the Catholic University of America, and the Municipal University of Akron. The completed studies are "Standards in the Non-Academic Subjects for College Entrance and Graduation in Relation to the Bachelors' Degrees," and the "Status of Physical Education, including Military Training and Hygiene, in American Colleges and Universities." Studies of standards and sources of standards of education in the biological sciences and in mathematics, in relation to the bachelors' degrees, have been completed for the State universities. A survey of the resources and standards of Y. M. C. A. colleges has also been made during the past year.

The division of higher education has cooperated with the Pan American Highway Commission in obtaining data on education pertaining to highway engineering and related subjects for all of the countries of Latin America.

Conferences and addresses.—The division organized and conducted the fifth Southern Conference on Negro Land-Grant College Edu-

cation, called by the Commissioner of Education, at the Agricultural and Technical College, Greensboro, N. C., April 16 and 17, 1925. The conference had for its principal aim the study of training in mechanic arts, trades, and industries. Special committees, including representatives of the industrial departments of these colleges, in cooperation with the Chief of the Industrial Service of the Federal Board for Vocational Education, outlined a program of investigation of the various questions involved. The conference also discussed various problems of internal administration and discipline of these colleges.

Addresses have been delivered by members of the division at the following educational meetings: Association of American Colleges; Society for the Promotion of Engineering Education; Maryland Branch of Collegiate Registrars; Conference on Negro Land-Grant College Education; National Council on Medical Education; Educational Association of the Methodist Episcopal Church, South, and the Southern Baptist Church; American Association of Junior Colleges; American Association for the Advancement of Agricultural Teachers; Tennessee College Association; colleges in Ohio, District of Columbia, Tennessee, and Kentucky; and the Alumni Association of the University of Michigan, at Washington, D. C.

(2) Division of Rural Education

New undertakings.—In addition to carrying on its regular work, the division has undertaken during the year a new type of activity, namely, that of cooperating on an extensive and systematic scale with selected educational organizations for the coordination and conduct of educational research studies. Two fields of cooperation are now in the process of development under the direction of specialists in this division:

(1) Cooperation with National, State, and other selected organizations in the field of secondary education. The plan of cooperation contemplates the organization of a national committee on research in secondary education whose purposes will be to stimulate purposeful research activities in this field, to advise and aid in investigations initiated by other agencies, and to coordinate research activities carried on by agencies interested in secondary education. The Bureau of Education, as secretariat, acts as the coordinating influence and becomes a clearing house of information for all research conducted by the cooperating organizations and institutions in the field of secondary education. This work has progressed to the extent that the National Committee on Secondary Education Research has been formed, and plans of procedure for its activities have been adopted. Four important subcommittees have been formed and are now proceeding with research projects. Plans were consummated, certain research studies of subcommittees were projected, and others previously organized were approved at a meeting held in the Bureau of Education June 15 and 16. The following organizations were represented: North Central Association of Colleges and Secondary Schools; National Association of Secondary School Principals; National Society of College Teachers of Education; National Education Association; Association of Colleges and Secondary Schools of the Southern States; State Departments of Education of Ohio, Pennsylvania, Alabama, Montana, and Maine; Cornell University; Teachers' Col-

lege, New York City; Stanford University; and the United States Bureau of Education.

(2) Cooperation with the executive committee of the Department of Rural Education of the National Education Association. The plan contemplates a type of cooperation similar to that indicated in the field of secondary education and applies to research in fields of rural education other than secondary. To date, two committees have been formed and two research studies projected. It is believed that the service rendered by the division will be extended in scope; that practice in research in the field of rural education will be standardized and improved, and results made available to a larger group through the plans indicated.

A specialist in the field of rural teacher preparation was added to the staff of the division in March, 1924. During the year work in this field has been initiated, with the idea of extending existing relationships and establishing new ones with workers in this field through visits to teacher-preparing institutions, attendance at conferences, addresses, correspondence, and publications. Plans of procedure for extending and carrying out this work in the division have been projected and some progress has been made in their promotion. A preliminary survey of the needs of this field has been made, information collected, and data assembled. A series of studies is contemplated which will enable the division to extend much needed service to those preparing rural school teachers.

Specialized service, previously established in the fields of administration, supervision, school consolidation, secondary education, and rural education statistics, has continued throughout the year, in a manner similar to that followed during the preceding year.

Surveys and special studies.—A large part of the time of specialists in the division is given to special investigation; collection of information in response to requests; research studies and surveys. During the year members of the division have directed or participated in eight educational surveys of counties, school systems, or schools. In six of these surveys field investigations have been followed by reports of findings and recommendations for improvement prepared for presentation to school officials concerned.

Of the other two surveys initiated, one will continue; advisory service is to be given to school officials concerned throughout the coming year. A report of the other survey is now nearing completion.

The following special studies have been made during the year and have been printed, presented for publication, or distributed in mimeographed or typewritten form:

A study of administrative practice in rural school organization, prepared for the guidance of State legislatures; a review of the status of school consolidation in the United States; present tendencies in State courses of study; investigation of school improvement associations in the United States; recent data on school consolidation in the United States; courses and curricula for the preparation of rural teachers offered in higher institutions in the United States; salaries of rural school teachers in 1924; a study of 260 school consolidations, a study of constructive tendencies in rural education in the United States during the biennium 1922-24; a review of 10 years

of educational progress in the United States; study of attendance in rural schools and certain factors influencing it; high-school education of the farm population; study of provisions for practice teaching in rural schools as followed in certain teacher-preparing institutions; study of school term in rural schools; studies of certain types of high schools in selected States; preparation of bibliography of research studies in secondary education; and minor projects including preparation of form for gathering data on rural schools for county superintendents; normal courses offered in secondary schools preparing rural teachers, and the like. Considerable progress has been made on the preparation of a bibliography of research studies in secondary education and a study of the county organization for school administration.

Publications.—Through its publications, bulletins, leaflets, and circulars; articles in SCHOOL LIFE; monthly editions of the Rural Schools News Letter, and correspondence, the division conducts informational and advisory service concerned with the varied phases of rural education in the United States. During the year 9 bulletins and 14 leaflets have been prepared by members of the division or under its direction. These have, for the most part, resulted from special studies, assigned projects, and requests for information concerned with problems in the field of rural education. Mimeographed circulars have been prepared and distributed, designed for the use of superintendents and supervisors of rural schools, and for principals and teachers in rural schools. These circulars are usually concerned with timely articles or information of a kind which should be circulated more quickly than is possible through printed publications. They are intended to familiarize school officials with recent developments, organization, and practice in rural schools.

Besides the publications mentioned, 34 articles in the bureau's monthly magazine, SCHOOL LIFE, were prepared in the division, 50 or more articles for the Clip Sheet, and 75 articles for the Rural Schools News Letter. The latter is a mimeographed circular which is distributed monthly to approximately 6,000 county newspapers and weekly and monthly magazines circulated among farm people and educational institutions.

Members of the staff contribute also to publications (educational and other) issued outside the Bureau of Education. Among the periodicals to which contributions were made during the year were the American School Board Journal, Music Trades, Journal of Rural Education, Musical America, State educational journals, and monthly, weekly, and daily newspapers.

Correspondence.—Informational and advisory service is given through the division correspondence. The correspondence covers a wide variety of topics, including requests for information and advice on all subjects concerned with rural education in the United States. Inquiries come from school superintendents, professors of education, teachers, and the general public. Among those most frequently received are requests for outlines which may be made the basis for rural teachers in summer schools, institutes, etc.; for advice concerning procedure in rural surveys; for organization of or assistance in the organization of programs of study in secondary and elementary schools; for special bibliographies, etc.

Field work.—During the year members of the division engaged in field work of different kinds in 20 different States covering all sections of the United States. The service includes, besides surveys and investigations, addresses before State teachers' associations, State conferences of county superintendents, State and county sectional conferences of principals, teachers, and supervisors, educational institutions, summer schools; participation in conferences of National, State, and local organizations; and general consultative and advisory service. Approximately 160 days have been spent in the field during the year; 70 addresses were made by members of the division to audiences varying in size from small groups to over 1,000 persons.

Miscellaneous activities.—Members of the division have rendered service on educational committees, National and State; prepared tables and charts which have been exhibited at State teachers' associations, national conferences, and higher institutions; assisted in the exhibit given in the Interior Department Building during the National Education Association convention, July, 1924, and assumed direction of the use of the auditorium during the same week. Besides the general exhibit a special exhibit was prepared for the Department of Rural Education and shown in the auditorium. Programs for exhibiting slides and moving pictures were prepared and their presentation directed by members of the division, providing continuous use of the auditorium when meetings of the National Education Association were not in session.

The division circulates slides and films prepared under its direction. Both slides and films may be organized for special purposes on request. During the year they have been circulated in 27 different States; they have been used by rural-school officials, superintendents and principals, and exhibited extensively in summer schools. While audiences in rural communities are small, it is estimated that at least 30,000 people have seen the slides or films during the year.

(3) Division of City Schools

Field service and surveys.—During the year the members of the division spent a total of 124 days on field work in 12 different States. This included the time given to school surveys and addresses at educational meetings. The following surveys were undertaken by members of the division:

(1) A general survey of the schools of Charlottesville, Va., which was made at the request of the Virginia State board of education. This survey was under the direction of the chief of the city schools division, who was assisted by two other members of the division, the chief of the division of physical education and school hygiene, one member of the rural education division, and two members of the Virginia State department of education and the dean of the school of education of the College of William and Mary, Williamsburg, Va. The report covered school organization, elementary and high school instruction, school hygiene, and vocational education. The report, comprising 198 typewritten pages, was submitted to the State board in June, 1925.

(2) In 1923–24 a school-building program was recommended to the school board of Fairmont, W. Va. The board adopted all the recommendations but one, and in 1924–25 invited the Bureau of Education to make further study of the situation. After several days' study by the chief of the division of city schools a second report was submitted, and all the recommendations were accepted by the board. As a result of the survey an architect has been employed to draw up plans for the buildings recommended. A bond issue of $800,000 will be voted on this fall.

(3) Upon the invitation of the school board of Martinsburg, W. Va., the bureau, through the chief of the division of city schools, made recommendations regarding a school-building program for the schools of that city. The report was adopted by the board, which submitted a bond issue of $310,000 for the erection of a new high-school building. The bond issue carried by a large majority.

(4) The chief of the division, upon invitation of the Virginia State board of education, assisted a member of the Virginia State department of education in making a survey of the schools of Hopewell, Va. The report has not been completed.

(5) In 1923–24 a school-building survey was made of the city of Portland, Oreg., under the direction of the specialist in city schools. A five-year building program was submitted to the board of education and adopted. The people of the city voted bonds to the amount of $5,000,000 to carry out this building program.

A second report is being prepared outlining a building program for a second and a third five-year period, beginning in 1927 and in 1932, respectively. This second report involves more office work than the first report in that it covers two five-year periods.

As a result of the first report a school-building program, based upon the platoon, or work-study-play, plan of organization, was adopted.

Conferences.—(1) The fourth national conference, under the auspices of the Bureau of Education, on the platoon, or work-study-play, plan of organization, was held in Cincinnati, Ohio, February 22–27, inclusive, in connection with the annual meeting of the department of superintendence of the National Education Association. The general sessions of the conference were held in the afternoon and evening of February 24. Those engaged in work in schools organized on the plan, and those who had expressed an interest in the plan were invited to attend the conference. The following committees, appointed by the Commissioner of Education to make studies of the problems and activities of platoon schools, held meetings, beginning the morning of February 23 and ending at noon, February 27: Committee on building, organization, training of teachers, auditorium, special activities, play, education of public opinion, and music. There were 41 addresses and free discussion at the eight committee meetings. So great was the interest in these committee meetings that it became necessary to limit admittance by cards.

In connection with the conference, an exhibit on platoon-school work was given in the music hall, which contained more than 300 mounts, and slides were shown to illustrate the activities of platoon schools.

As a result of the four conferences called by the Commissioner of Education the group present at the evening session formed a permanent organization called the National Association of Platoon, or Work-Study-Play, Schools. The Bureau of Education having sponsored these meetings for four years, does not contemplate any more national conferences on the plan. The newly formed association has invited the bureau's specialist in city schools to act as executive secretary of the association.

The specialist in city schools will continue to work with the national committees as in the past in order to have the means of receiving through them up-to-date information regarding the platoon plan.

(2) The Bureau of Education, in cooperation with the University of Pennsylvania, held a conference at Philadelphia, March 27, 1925, to discuss individualized instruction. There were two general sessions, with an attendance of 1,800 at each session. Eight round-table conferences were held to discuss topics of interest to special groups of teachers. The attendance at each of these was from 25 to 50.

As an outcome of the conference, an association of teachers interested in the Dalton plan of individualized instruction has been organized.

Publications.—The following bulletins and leaflets were prepared by members of the division or under their direction: "Leaflet to Parents," which was used as a home education circular and distributed shortly before American Education Week; "The Use of Intelligent and Achievement Tests," which summarizes the chief purposes for which these tests are used; "Some Recent Movements in City Schools"; "Kindergarten Legislation"; nature-study bulletins—Cycles of Garden and Plant Life, Cycles of Animal Life in Field and Stream, Cycles of Home Life, Cycles of Town Life, Digest of Nature-Study Courses in Normal Schools and City School Systems; "Suggestions for the Observance of American Education Week"; Broadside Sheet for American Education Week; "The Kindergarten in Educational Surveys," which summarizes the principal recommendations found in survey reports concerning the kindergarten. The following bulletins and leaflets have been prepared under the direction of the city schools division by persons not members of the Bureau of Education; "Time Allotments in the Elementary School Subjects," by Fred C. Ayer; "The Motivation of Arithmetic," by G. M. Wilson, Boston University; "Personnel and Organization in the Smaller Schools," by Harry Ganders, State Teachers College, Greeley, Colo.; "Work-Study-Play or Platoon Plan," by Charles A. Rice, assistant superintendent of schools, Portland, Oreg.; "The Organization and Development of Pittsburgh Platoon Schools," by W. F. Kennedy, director of platoon schools, Pittsburgh, Pa.; "The Work-Study-Play Curricula," by John G. Rossman, assistant superintendent of schools, Gary, Ind.; and "The Platoon Schools, Birmingham, Ala.," by C. B. Glenn, superintendent of schools, Birmingham, Ala.

Articles were published in educational journals under the following titles: "Individual Instruction"; "Sequence of Handwork for Kindergarten-Primary Classes"; "A Kindergarten-Primary School

Project Involving Handwork"; "How to Teach Geography to Beginners"; "Facts of Interest About Kindergarten Laws" and "The Growth of the Platoon School."

Miscellaneous activities.—Five years ago the Bureau of Education inaugurated a week of national observance with reference to educational needs. This week is now known as American Education Week. Material for this observance last year was prepared and distributed by the chief of the division of city schools. This campaign has become increasingly successful, and is probably better established and more widely known than any other so-called "week." In this enterprise the bureau has enjoyed the unstinted cooperation of more than a hundred educational, civic, and patriotic organizations. In this, the National Education Association and American Legion have taken a leading part. The latter organization inaugurated a week of its own at one time, but later merged its campaign into that of the Bureau of Education.

In the field of kindergarten education the division of city schools has secured the names of over 300 kindergarten teachers in foreign missionary service and supplied them with information and materials relating to kindergarten work, and has prepared a new set of lantern slides, with an appropriate lecture setting forth a series of kindergarten projects.

(4) Division of Physical Education and School Hygiene

Personnel.—There was one resignation from the staff of this division during the year, and at its close the personnel consists of a specialist, an assistant specialist, a part-time field agent, and one clerical assistant.

Correspondence.—The number of special inquiries received during the past year indicates that interest in the physical welfare of the school child is not only undiminished but is increasing.

Studies and publications.—Research completed during the year includes: (*a*) A study of health administration in city and rural schools; (*b*) requirements and credits in physical education and athletics in American colleges and universities; (*c*) courses in professional training in physical education in universities, colleges, normal schools, and special schools; and (*d*) State requirements for directors and supervisors of physical education.

A four-year outline course in hygiene and physiology for high schools was prepared, circulars on physical education and on school nursing were issued, a radio message and suggestions for "Physical Education Day" (American Education Week) were prepared, and the divisional section for the biennial survey was written.

Conferences.—The division initiated two important conferences, that of State directors of physical education, held in Rochester, N. Y., on April 2, and a meeting of institutions giving professional training in physical education, which took place in Washington, D. C., May 7 and 8. The National Conference on Outdoor Recreation was attended, information for the use of committees of this conference was prepared, and the chief of the division was elected a member of the committee on social relations. A conference of directors of physical education in colleges, the annual meeting of the National

Education Association, the conferences of the Playground and Recreation Association of America, the New Jersey Public Health Nurses Association, the American Child Health Association, and the northwestern district meeting of the North Carolina Education Association were attended and addresses were delivered at the last three meetings, and also at the conference in Washington, D. C.

Miscellaneous activities.—The special agent in school planning and construction, besides giving much information and advice by correspondence, visited and assisted with the planning of school buildings and grounds at Florence and Gadsden, Ala.; Little Rock, Ark.; Daytona and New Smyrna, Fla.; Alexandria, La.; Jackson, Miss.; Currituck, N. C.; Athens, Carthage, and Etowa, Tenn.

The chief of the division assisted in the survey of schools of Charlottesville, Va., and inspected the schools of Burlington, N. C.

A study of summer camps, especially in their relationship to the public schools, was carried out in the eastern section of the country by the assistant specialist.

(5) Service Division

For administrative purposes certain members of the bureau's staff, whose fields of service touch the various levels of the educational system from the elementary schools to the universities, have been set apart in the service division. Their activities for the fiscal year are summarized as follows:

Industrial education.—The position of specialist in industrial education was vacant until the first half of the year 1925. This report, therefore, covers only the latter six months of the fiscal year 1924–25.

Early in the year an industrial education dinner conference was held in connection with the meeting in Chicago of the Vocational Education Association of the Middle West. A program was prepared on the subject "The General Shop." Representatives from 14 States were in attendance. It is expected that a report of the conference will be published by the Bureau of Education.

In cooperation with one of the regional agents of the Federal Board for Vocational Education, the specialist in industrial education held a conference in Wheeling, W. Va., with representatives from the State departments of education of Ohio and West Virginia, for the purpose of discussing the objectives in manual-arts work and reviewing the proposed bulletin on manual arts to be issued by the State department of education of Ohio.

In May a two-day conference was held at Portland, Me., with representatives of the State departments of education from Maine, New Hampshire, and Vermont. The conference was devoted to a critical discussion of the aims of the manual-arts work and the value of specific types of courses for the realization of these aims. At both the Wheeling and Portland conferences the need for developing, through studies and conferences, some general agreement as to specific objectives for the manual-arts work, other than that of a strictly vocational character, was emphasized.

For the purpose of aiding some penal institutions in the development of industrial-education courses, the specialist in industrial

education has had interviews and correspondence with some State and Federal agencies and individuals interested in this movement, and information is being compiled for distribution.

The specialist in industrial education spent a total of 37 days in field work in 11 different States. As a part of this service he delivered addresses as follows: Industrial-education dinner conference, Chicago, Ill.; industrial section of the department of superintendence of the National Education Association, Cincinnati, Ohio; Rotary Club, Hagerstown, Md.; Franklin College, Franklin, Ind.; and the State Agricultural and Mechanical College, Orangeburg, S. C.; commencement exercises of Industrial Demonstration School, Baltimore, Md., and of Riverdale, Md., public school.

For four months the specialist, in cooperation with the University of Maryland, carried on in Baltimore three conferences on industrial education. One conference was composed of industrial teachers in Baltimore, organized as a teacher-training group on the conference basis. The other two groups dealt with the improvement of foremanship. One group was composed of a number of foremen from representative industries, the other was a plant group in a large meat-packing plant. All groups met weekly and the work was conducted by the conference method. A mimeographed report was made of the work of each conference.

Commercial education.—Early in the year the associate specialist in commercial education prepared reports on several conferences held during the previous year, relating to the preparation of high-school students for business careers. He also prepared a leaflet containing certain statistics relating to business education in the colleges and universities.

In connection with a trip to Lima, Peru, the associate specialist in this field delivered several addresses before the Third Pan American Scientific Congress, the Society of Engineers of Peru, and the National Institute of Panama. He also spoke before the Army War College in Washington, D. C.; the Southern Commercial Teachers Association; University of South Carolina; and the Washington (D. C.) School of Accountancy.

During the year one conference relating to this field of education was held at Bowling Green (Kentucky) University. The conference was largely attended, especially by students in the summer session at the university.

The position in commercial education has been vacant during much of the fiscal year covered by this report.

Home-economics education.—In cooperation with the American Home Economics Association, the specialist in home economics conducted a city supervisors' breakfast conference in Buffalo, N. Y., on July 1, 1924, and on June 30, 1925, was chairman of the American Home Economics program at the National Education meeting in Indianapolis, Ind. A series of conferences with city supervisors, teachers, and home-economics sections of State teachers' associations were conducted at the following places: Indianapolis, Ind.; Chicago, Ill.; St. Paul and Minneapolis, Minn.; Milwaukee, Wis.; Fargo, N. Dak.; Missoula, Mont.; Seattle, Wash.; Portland, Corvallis, and Eugene, Oreg.; Chico, San Francisco, Oakland, and Los Angeles, Calif.; El Paso, San Antonio, and Austin, Tex.; Tulsa,

Okla.; and Kansas City, Mo. At these conferences problems in public-school home-economics education were discussed. Twenty-three addresses were delivered before 4,295 students, teachers, and supervisors of home economics.

During the year the specialist in home economics also addressed the State home-economics associations of New York, Ohio, and Maryland; the New England Home Economics Association, at Simmons College, Boston, Mass.; the Housekeepers' Alliance, Providence, R. I.; representatives of the United States Department of Agriculture, Washington, D. C.; the health-education conference of the American Child Health Association, Chicago, Ill. (three addresses); representative financiers and educators of Cleveland, Ohio; and the home-economics teachers of the public schools of Cleveland.

The specialist in home economics assisted in a survey of higher education at the College for Women of Western Reserve University, in Cleveland, Ohio. Data were also obtained through questionnaires sent to the State and county superintendents as to the number of schools giving home economics; number of home-economic teachers giving courses in child care and welfare; the family, personal hygiene, and health; food, nutrition, and clothing; number of home-economics students taking such courses and the annual expenditures of home-economics departments.

An inventory was made of the home activities of 570 girls attending the Hine and Columbia Junior High Schools of Washington, D. C., to assist the directors of domestic science and art in the schools of the District of Columbia in the preparation of a course of study in household economics.

An investigation was made of the status of home economics in the junior and senior high schools, the results of which will probably be published in bulletin form.

Questionnaires were sent to State and city supervisors of home economics, presidents of universities and normal schools, heads of home-economics departments, deans of women, deans of education, and State and county superintendents to ascertain their opinions concerning the contribution of home economics to general education and its relation to the social sciences.

The specialist in home economics prepared an article for the Broadside for American Education Week, entitled "Education for the home"; a news letter entitle "Home-economics suggestions for parent-teacher associations"; a criticism of the industrial-arts and home-economics courses of study for the Alaskan schools; a report for the Biennial Survey of Education; and a report of the physical plant and status of home-economics and physical education in the College for Women of Western Reserve University in connection with the higher education survey at Cleveland.

Work in progress includes the study of the status of home economics in the junior and senior high schools and preparation of a bulletin; investigation of the status of home economics in the one-room rural school and the consolidated school and preparation of a bulletin; preparation of program for home-economics luncheon conference at the meeting of the American Home Economics Association at San Francisco August 5.

Ready for publication: Findings concerning what contribution does food study make to the health of Cleveland families and to

the happiness of Cleveland families; an outline concerning what clothing and textiles contribute to health.

Educational legislation.—During the past fiscal year the assistant specialist in school legislation has carried on several lines of work, as follows: (1) The preparation of special reports on the legal aspects of single subjects such as compulsory school attendance; (2) the issuance of circulars of information relating to school laws; (3) contributions to School Life and other publications of the Bureau of Education; (4) interpretive reviews of the school legislation of specified periods; (5) assistance to certain States in the writing of new school codes; and (6) giving information and assistance through correspondence and similar means.

Within the year special studies were undertaken in State laws providing for rural high schools, State regulation of degree-conferring institutions, laws relating to the examination of pupils completing the elementary grades, and school-attendance requirements. The first-mentioned subject was treated in a study begun in the fiscal year 1923–24 but not completed until last September. A projected bulletin study of the regulation of degree-conferring institutions was begun within the past year but has not yet been completed. The compilation of legal provisions for eighth-grade examinations was undertaken in the early part of the fiscal year and was completed at the end of the fiscal year.

Within the first half of the calendar year 1925, when many State legislatures were in session, a Legislative Circular, giving information with respect to progress in school legislation, was issued from time to time. In all, seven numbers of this circular were sent out to a selected group of persons interested in school-law information.

Contributions to the periodical and special publications of the Bureau of Education included three articles for use in connection with the observance of American Education Week, two articles for School Life, and one number of "Home Education Letter." A review of educational legislation, passed in the two-year period 1923–24, and a similar but briefer review of the enactments of 1925, were written within the year and submitted for publication or other appropriate use by the bureau.

In the early part of the present calendar year, the assistant specialist in school legislation rendered assistance in the preparation of two proposed new school codes. In Tennessee he examined critically and made suggestions relative to a legislative bill embodying a complete recodification of the State's school laws. The assistant specialist also spent five weeks in the spring of 1925 in Frankfort, Ky., where he prepared a manuscript of about 250 typewritten pages comprising in codified form all school laws of general application in the State. This work was done in collaboration with a legislative committee of the Kentucky Education Association. The plan is to have the bill introduced in the Kentucky Legislature of 1926 and if possible to obtain its adoption as the Kentucky school code.

Foreign education.—The main purpose of the section is to gather and keep on hand current information about the educational systems of all the foreign countries and make it available to those who are interested, by means of correspondence, personal interviews, bulletins, circulars, and articles. Throughout the year the work

essential to carrying out this purpose has been continued. Information on practically every phase of education has been obtained through the Departments of State and of Commerce, from some of the foreign legations in the United States, and from periodicals, reports, bulletins, catalogues, and other publications, official and private, of foreign countries. The assistant specialist in foreign education systems gave one week to visiting a few of the many agencies now interested in different school activities abroad, with a view to arranging for exchanges of data with those agencies and avoiding duplication of effort.

Incident to interpreting the educational practice, laws, and regulations of other countries in the light of American experience, a total of written translations on educational subjects alone amounting to nearly 200,000 words were made. These were from 21 languages and included Arabic, Bulgarian, Chinese, Czechoslovakian, Danish, Dutch, German, Greek, Hebrew, Hungarian, Yugoslavian, Norwegian, Polish, Russian, Spanish, Swedish, Bohemian, French, Italian, Portuguese, and Rumanian. Oral translation far exceeded the written in amount. Assistance in translating legal documents and scientific articles was given to other bureaus and departments of the Government.

Five hundred or more letters asking for various kinds of information were answered as accurately and fully as practicable. Considerable numbers of university students were given aid and direction in their reading and in preparing papers or theses. The many applicants for teaching positions in foreign countries were, in general, directed to apply to the school authorities of those countries, since the section has no facilities for teacher placement. The attention of other divisions of the bureau has been called to items of interest or value in their special fields. Owing to pressure of other duties no bulletins were prepared for publication during the year, but work was begun on a survey of foreign education for the biennium 1922-24, and on a study of ministries of education.

The present immigration law makes necessary a definite knowledge of the school training of the nonquota immigrants who desire to come here to continue their studies. The officials of a large number of institutions in 12 States and the District of Columbia have asked the section to aid in evaluating certificates, diplomas, and records from approximately 75 different schools in 34 foreign countries. The credentials came from many kinds of public and private foreign institutions and represented, for the most part, difficult and doubtful cases. They came from primary, middle, and secondary schools, lycées, gymnasia, technische hochshule, commercial schools of both secondary and university grade, teacher-training institutions of various types, colleges, colegios, and universities. The credentials, if in a language other than English, were translated, and the officials submitting them were advised as to their value in terms of education in the United States.

General Service Activities

The general service activities of the bureau are administered by the commissioner through the chief clerk, who also acts as commissioner in the absence of the commissioner. These general service

activities include the statistical division, the editorial division, the library division, home education, mails and files, Alaska division, stenographers, and messengers.

STATISTICAL DIVISION

The statistical survey for 1922 was completed and published. Data were collected for 1924, tabulations made, and bulletins completed on kindergartens, private high schools and academies, and State universities and State colleges. Data were collected for the school year 1923–24 and tabulations partially completed for the following: Teachers colleges and normal schools; city school systems; public high schools; rural schools; universities, colleges, and professional schools; and State school systems. One circular was issued on per capita costs in city schools for 1923–24. A bulletin on accredited secondary schools, one on the value of education to the State, and one on the housing, staffing, and organization of State departments of education were completed and sent in for publication. A study was made but not published on attendance data for public schools as required by State departments of education.

Two cooperative studies were begun during the year, one on the revision of the bureau publication on uniform records and accounts. Committees are working with the chief of the division from the National Association of Public School Business Officials, and from the department of superintendence of the National Education Association on this revision. Another study is being made in collaboration with the American Council on Education on the present status and value of modern foreign-language study and the methods of teaching such languages.

Conferences were held with State officials and committees from college groups, statistical associations, the National League of Compulsory Officials, the National Association of Public School Officials, the American Association of Teachers Colleges, and the National Education Association.

During the year the division was assisted materially by four field agents who solicited information directly from institutions and school systems. These men traveled 42,000 miles, visited 617 places, and sent in 666 reports. The data thus gathered are the most complete of any thus far obtained by the bureau. Furthermore, this field service will make it possible to get out the statistics more promptly than was possible under the questionnaire method.

EDITORIAL DIVISION

Publications, varying in extent from a leaflet of a few pages to the comprehensive Biennial Survey of Education, are in the aggregate the most effective means of influencing educational thought and practice which is available to the Bureau of Education. In the number and importance of its printed documents the bureau far excels any institution and any other single agency for education in the United States, and perhaps in the world. Certainly no Government other than our own has produced such an extensive educational literature. The achievements of the Bureau of Education in this respect are a

constant source of interest to educators of other lands. About 700 of the bureau's publications may now be had either gratuitously or by purchase at nominal prices from the Superintendent of Documents; a somewhat larger number have served their purposes and have been allowed to go out of print.

The policy of strict economy which prevails throughout the Government service resulted during the year, however, in a material reduction in the distribution of documents of the bureau.

Some of the belated statistical reports of 1921–22 were issued during the fiscal year 1924–25, and they brought the whole number of bulletins printed during the year to 46. Several of these were necessarily of greater extent than has been usual during recent years, and that increased the average size of the bulletins from 49 to 70 pages.

The number of leaflets, circulars, and the like published during the year amounted to 87, a reduction of 16 from the number reported for 1923–24. The principal reduction, however, was brought about by issuing unusually small editions of the documents that were printed. Largely in consequence of this the Superintendent of Documents distributed for this bureau during the past year 24,999 fewer bulletins, 984 fewer annual reports, 5,607 fewer leaflets and miscellaneous documents, and 93,648 fewer copies of School Life than in the year 1923–24. About 80,000 copies of two special numbers of School Life were issued in the earlier year but, aside from that fact, the decrease in the number of free copies distributed was about 3,000 per month. Partly because of this but more because of the increase of the subscription price from 30 cents to 50 cents a year, the number of paid subscribers to School Life fell from 7,665 to 5,913.

Similarly, the reduction in number of free copies of general publications resulted in a falling off of nearly 8,000 in the number of letters requesting documents.

Publications of the Bureau of Education, July 1, 1924, to June 30, 1925

BULLETINS, 1923

No. 55. Bibliography of educational and psychological tests and measurements. Margaret Doherty and Josephine MacLatchy, under the direction of B. R. Buckingham.

BULLETINS, 1924

No. 4. A type rural high school. C. A. Nelson and E. E. Windes.
No. 5. The chief State school official. Ward G. Reeder.
No. 6. Statistics of land-grant colleges, 1922. L. E. Blauch.
No. 7. Statistics of public high schools, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 8. Visual education departments in educational institutions. A. P. Hollis.
No. 9. Intelligence of seniors in the high schools of Massachusetts. Stephen S. Colvin and Andrew H. MacPhail.
No. 10. Statistics of teachers colleges and normal schools, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 11. Manual arts in the junior high school. William E. Roberts.
No. 13. Biennial Survey of Education, 1920–1922, vol. 1 (text).
No. 15. The daily schedule in the high school. J. B. Edmonson, W. E. Bow, and Irvin Van Tassell.
No. 16. Objectives in commercial engineering. Glen L. Swiggett.
No. 17. American school buildings. Fletcher B. Dresslar.
No. 18. Introduction of algebra into American schools in the eighteenth century. Lao G. Simons.
No. 19. Schools for adults in prisons. A. C. Hill.

No. 20. Statistics of universities, colleges, and professional schools. Advance sheets from Biennial Survey, 1920–1922.
No. 22. Technique of procedure in collegiate registration. George T. Avery.
No. 23. Government publications useful to teachers. E. E. Windes.
No. 24. Organization and administration of the duplicate school in Philadelphia, Pa.
No. 25. A platoon school in Kansas City, Mo. G. A. Diemer.
No. 26. Statistics of State universities and State colleges for the year ending June 30, 1923.
No. 27. Record of current educational publications, June 1, 1924.
No. 28. Fiscal support of State universities and State colleges. C. H. Thurber.
No. 29. Legislation on the junior high school. Paul W. Terry and W. J. Marquis.
No. 30. Land-grant college education, 1910 to 1920. Part I, History and educational objectives.
No. 31. Statistics of State school systems, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 32. A study of 260 school consolidations. J. F. Abel.
No. 33. The quest of youth. A pageant for schools. Hazel Mackaye.
No. 34. Statistics of city school systems, 1921–22. Advance sheets from Biennial Survey, 1920–1922.
No. 35. The trend of college entrance requirements, 1913–1922. Harry C. McKown.
No. 36. A manual of educational legislation.
No. 37. Land-grant college education, 1910 to 1920. Part II, The liberal arts and sciences, including miscellaneous subjects and activities.
No. 38. Statistical survey of education, 1921–22. Frank M. Phillips. Advance sheets from Biennial Survey, 1920–1922.
No. 39. Visual education and the St. Louis school museum. Carl G. Rathmann.
No. 40. Legal provisions for rural high schools. William R. Hood.

BULLETINS, 1925

No. 1. Educational directory, 1925.
No. 2. Important State laws relating to education, 1922–1923. William R. Hood.
No. 3. Contribution of home economics to citizenship training. Emeline S. Whitcomb.
No. 4. Land-grant college education, 1910 to 1920. Part III, Agriculture.
No. 5. Land-grant college education, 1910 to 1920. Part IV, Engineering and mechanic arts.
No. 6. High-school education of the farm population in selected States. E. E. Windes.
No. 7. Kindergarten legislation. Nina C. Vandewalker.
No. 8. Elementary instruction of adults. Report of national illiteracy conference committee. Charles M. Herlihy, chairman.
No. 9. Some lessons from a decade of rural supervision. Annie Reynolds.
No. 10. The rural high school: Its organization and curriculum. Emery N. Ferris.
No. 14. Record of current educational publications, April 1, 1925.

CITY SCHOOL LEAFLETS

No. 17. A basis for music in the work-study-play school. Will Earhart.
No. 18. Samples of teacher self-rating cards. Bertha Y. Hebb.
No. 19. Time allotments in the elementary school subjects. Fred C. Ayer.
No. 20. Uses of intelligence and achievement tests in 215 cities. W. S. Deffenbaugh.

COMMERCIAL EDUCATION LEAFLETS

No. 8. Cooperative vocational guidance. G. L. Swiggett.
No. 9. Commercial occupations. G. L. Swiggett.
No. 10. Coordination of business preparation and placement. G. L. Swiggett.

HEALTH EDUCATION PUBLICATIONS

Health Education Series

No. 17. Helps for the rural-school nurse. Harriet Wedgwood and Hazel Wedgwood.
No. 18. What every teacher should know about the physical condition of her pupils. James F. Rogers.

Cards

No. 1. What is health.
Snellen Test Card.

Miscellaneous

Price list (2 editions).

Physical education series

No. 5. Problems in physical education. J. F. Rogers.

School health studies

No. 7. Recognition of health as an objective. Harriet Wedgwood.
No. 8. School health supervision. Harriet Wedgwood.

HIGHER EDUCATION CIRCULARS

No. 29. Rhodes scholarships, 1925.

HOME ECONOMICS CIRCULARS

No. 18. Titles of completed research from home economics departments in American colleges and universities, 1918 to 1923. Emeline S. Whitcomb.
No. 19. Sources of useful information for the teacher of home economics. Emeline S. Whitcomb.

HOME EDUCATION CIRCULARS

No. 6. Cooperation in adult education. Ellen C. Lombard.
No. 7. Teacher's and pupil's reading circles. Ellen C. Lombard.

INDUSTRIAL EDUCATION CIRCULARS

No. 22. The preparation of teachers. (Conference report.)
No. 23. Vocational education in Geneva, Switzerland. Elise Hatt.

KINDERGARTEN CIRCULARS

No. 8. What they think of the kindergarten. (Reprint.)
No. 17. How the kindergarten aids children's progress in the grades. Nina C. Vandewalker.
No. 18. How the kindergarten educates. Luella A. Palmer and Mary G. Waite.
Extension Series No. 1. How to arouse public interest in kindergartens.
Folder. Why your child should go to the kindergarten. Julia Wade Abbot. (2 editions.)

LIBRARY LEAFLETS (LISTS OF REFERENCES)

No. 24. Money value of education.
No. 25. Vocational education.
No. 26. Rural life and culture.
No. 27. Junior high school.
No. 28. Higher education.
No. 29. Play and playgrounds.
No. 30. Education for citizenship.
No. 31. Student self-government and the honor system.

READING COURSES

No. 1. World's great literary Bibles. (Reprint.)
No. 2. Great literature—ancient, medieval, and modern. (Reprint.)
No. 3. Reading course for parents. (Reprint.)
No. 4. Reading course for boys. (Reprint.)
No. 5. Reading course for girls. (Reprint.)
No. 7. Thirty world heroes. (Reprint.)
No. 8. American literature. (Reprint.)
No. 9. Thirty American heroes. (Reprint.)
No. 10. American history. (Reprint.)
No. 12. Heroes of American democracy. (Reprint.)
No. 21. Twenty good books for parents. (Reprint.)
No. 23. How to know architecture. R. F. Bach. (Reprint.)
No. 24. Citizenship and government. G. F. Zook. (Reprint.)
No. 25. Pathways to health. Harriet Wedgwood. (Reprint.)
No. 26. Sixty selected stories for boys and girls. Florence C. Fox.
No. 27. Poetical literature for boys and girls. Florence C. Fox.
No. 28. Kindergarten ideals in the home and school. Nina C. Vandewalker.
No. 29. The preschool child.

RURAL SCHOOL LEAFLETS

No. 25. Ypsilanti Kiwanis Club and the Country schools. M. S. Pittman.
No. 26. Types of courses of study in agriculture. E. E. Windes.
No. 27. Milpitas—a rural school project in teacher training. Clara H. Smith and La Rae Olvey.
No. 28. The county unit in New Mexico. John V. Conway.
No. 29. Transportation costs in Minnesota consolidated schools. George A. Selke.
No. 30. Orange township consolidated school. Macy Campbell.
No. 31. Take no risks. J. F. Abel.
No. 32. Improvement of rural schools by standardization. Edith A. Lathrop.
No. 33. Preparation of rural teachers in high schools. Mabel Carney.
No. 34. Some practical uses of auditoriums in the rural schools of Montgomery County, Ala. Lillian Allen and Cora Pearson.
No. 35. Improvement in teaching reading in rural schools. Maud C. Newbury.
No. 36. Publications of the United States Bureau of Education pertaining to rural education. Florence E. Reynolds.
No. 37. Courses in rural education offered in universities, colleges, and normal schools.
No. 38. Preparation of teachers for rural consolidated and village schools. L. J. Alleman.

REPORT

Report of the Commissioner of Education for the year ended June 30, 1924.

STATISTICAL CIRCULARS

No. 4. Per capita costs in city schools, 1923–24.

TEACHERS' LEAFLETS

No. 17. List of books for a teacher's professional library; a classified list of 100 titles. Edith A. Wright.

MISCELLANEOUS

Declaration of Independence. (Facsimile.)
Federal council of citizenship training.
An opportunity for the promotion of better citizenship.
Suggestions for the observance of American Education Week.
School and teacher day of American Education Week.
Program—American Education Week.
Broadside—American Education Week.
Publications available, September, 1924.
Publications available, March, 1925.
Publications of interest to high-school teachers.

CLIP SHEET

July, 1924, to June, 1925 (monthly; 12 numbers).

PERIODICAL

School Life, Vol. 10, Nos. 1–10, September, 1924, to June, 1925, inclusive (10 numbers).
School Life, index and title-page, Vol. 9, September, 1923, to June, 1924.

(Unfinished printing—June 30, 1925)

BULLETINS, 1925

No. 11. Accredited secondary schools.
No. 12. Statistics of State universities and State colleges for the year ending June 30, 1924.
No. 13. Bibliography of science teaching in secondary schools. Earl R. Glenn, assisted by Josephine Walker.

HEALTH EDUCATION PUBLICATIONS

Physical Education Series

No. 6. The school as the people's clubhouse. Harold O. Berg.

LIBRARY DIVISION

Considerable additions were made to the library of the bureau during the year, chiefly by the incorporation of current educational material. The volumes and pamphlets acquired by gift, by exchange, and by purchase numbered 730. Other additions were 670 volumes of copyright transfers from the Library of Congress and 5,448 numbers of serial publications. A great number of current periodicals were also accessioned.

Large numbers of the printed, mimeographed, and typewritten bibliographies prepared by the library were distributed both by mail and directly to inquirers. The practice of frequent revision of these lists was continued. The number revised and brought up to date was 206, while 40 entirely new bibliographies were compiled. During the year six lists of references in the library leaflet series were issued as follows: No. 26, Rural life and culture; No. 27, Junior high school; No. 28, Higher education; No. 29, Play and playgrounds; No. 30, Education for citizenship; and No. 31, Student self-government and the honor system. Copy for Library Leaflet No. 32, List of references on vocational guidance, was completed ready for printing. The record of current educational publications received to April 1, 1925, was compiled and published as Bulletin, 1925, No. 14. The library prepared its usual sections for the Educational Directory, 1925.

Numerous outside visitors and borrowers sought the service of the library. During the year, approximately 1,800 volumes were lent outside the office, many of these loans being forwarded by mail. An extensive information service was also conducted by correspondence.

The cataloguing of the library continued to make progress, with a total of 2,681 volumes catalogued and classified. Under the system of cooperation with the Card Division of the Library of Congress, cards for about 600 titles were printed from copy supplied by the cataloguers of the Bureau of Education.

The statistical tables of public, society, and school libraries in 1923 were revised in the library division, and it is expected that this material will soon be ready for the printer.

Form letters were prepared for collecting information for a bulletin descriptive of educational associations to be compiled by the library.

The chief of division had in preparation a chapter on library activities in the United States for the Biennial Survey of Education, 1922–1924. He also contributed to each of the 10 numbers of School Life a page of notices of new educational books, with descriptive annotations. As official representative of the bureau, he attended the conferences of the Special Libraries Association and of the New England Librarians, held at Swampscott, Mass., during the week of June 22, 1925.

HOME EDUCATION

With the establishment of cooperative arrangements with the University of Kansas this year, 18 States and 1 Territory are now enlisted in the conduct of the reading courses of the Bureau of Education. An experiment in cooperation is in progress in Oklahoma in connection with the Home Education Section. Instead of establishing cooperation in this State with the State university, an exception to the regular practice has been made in securing the cooperation of the State library commission. This has been a successful project, especially in reaching the farm women and in interesting them in home reading. Louisiana is another exception to the regular practice of selecting State universities to cooperate in this work. In this State the reading courses are conducted in the State Normal College.

There is no abatement in the interest in these courses. The incoming mail averages over 1,500 pieces each month, and 1,522 readers were enrolled during the year. The issuance of 131 certificates during the year brings the total number of certificates granted to more than 800. The number of readers who have at some time enrolled for the reading courses exceeds 18,500.

More than a score of specialists in various fields have collaborated in the preparation of appropriate lists of books for readers. This is in accord with the practice in the bureau of securing the consensus of opinion of the best authorities on each subject. Twenty-nine courses have been issued, two of which were published during the year.

Two national conferences on home education have been held within the past three years. These conferences were initiated and organized under the direction of the Commissioner of Education. The first was held in cooperation with the National University Extension Association, and the second with the cooperation of that association, the American Library Association, and the National Congress of Parents and Teachers. The outcome of the second conference has been the appointment, by the Commissioner of Education, of a committee of seven to study the whole subject of home education; the committee consisting of Prof. Charles G. Maphis, University of Virginia; Prof. R. R. Price, University of Minnesota; Judson T. Jennings, Seattle Public Library; L. L. Dickerson, American Library Association; Mrs. A. H. Reeve, president National Congress of

Parents and Teachers; and Mrs. D. W. Cooper, president New Jersey Parent-Teachers Association.

During the past year the report of the proceedings of the second conference was prepared and issued as Home Education Circular No. 6, "Cooperation in Adult Education."

The home education section aims to reach the homes through the distribution of its reading courses, circular letters, press articles, circulars, correspondence, conferences, and addresses. There has been considerable demand for suitable material for programs for the use of parent-teacher associations. In the interest of the schools which these organizations serve the Home Education Section has issued seven home education letters during the year, distributing upwards of 21,000 copies. They are entitled: What parents should look for in visiting the schools, The health of school children, New school legislation, Campaign for the kindergarten, Working for the betterment of rural schools, Home economics suggestions for parent-teacher associations, and Parents' responsibility for the preparation of their children for school life. The demand for this type of service warrants its continuance.

A study of the conditions under which teachers' and pupils' reading circles are conducted by State departments of education has been made, and the results have been set forth in a printed circular entiled "Teachers' and Pupils' Reading Circles," Home Education Circular No. 7, 1925. For the Biennial Survey of Education, 1922–1924, a study of the work of parent-teacher associations has been made and the results have been prepared as a chapter on parent-teacher associations.

The junior specialist in home education represented the bureau and addressed the convention of the National Congress of Parents and Teachers at Austin, Texas, addressed the library school at St. Louis, Mo., and prepared reports for the meetings of the American Library Association and the National University Extension Association.

There is in progress a cooperative project in the preparation of a list of 40 books that every child should read before reaching the age of 16. This work is carried on with the cooperation of several educators and children's librarians. There is also in progress a fairly complete bibliography of the publications of parent-teacher associations.

MAILS AND FILES

The mailing and filing of correspondence in the Bureau of Education requires the full time of two persons and part time of another. The bureau no longer attempts to enumerate the number of pieces of mail handled annually. All multigraph work, which includes circulars of information, blanks for office records, questionnaires, bibliographies, announcement of conferences, etc., is now taken care of by the Department of the Interior.

ALASKA DIVISION

The Alaska division of the Bureau of Education undertakes to make provision for the education of the natives of Alaska, extend to them all possible medical relief, train them in the industries, and

relieve worthy cases of destitution. The work in Alaska is under the direct supervision of the chief of the Alaska division, with headquarters in Seattle. The Seattle office functions as a purchasing and disbursing agent for all the bureau's activities in Alaska. It selects teachers and other personnel to recommend to the Commissioner of Education for appointment; it expends or invests, under the direction of the interested parties, funds sent to it by employees in Alaska, by the cooperative stores of the natives, or by individual natives of Alaska; it also sells commodities, such as furs, ivory, and fish, for the natives, and remits, deposits, or expends the proceeds as directed.

The administration of this work involves great difficulties, arising principally from the remoteness of most of the villages, the enormous distances between them, the meager means of communication, and the severity of the climate in many sections. Most of the natives are a seafaring people, scattered along thousands of miles of coast and on the great rivers, in the villages ranging from 30 or 40 to 300 or 500 in population. The work would extend to the utmost limits of the United States in terms of distance, with schools in Maine, California, Georgia, and Minnesota. One of the school districts is twice the size of the State of Illinois. Many of the settlements are far beyond the limits of transportation and regular mail service, and one-third of the native population is north of the Arctic Circle.

Education.—The educational work in Alaska has been extended considerably during the past year. The most important phase of this extension has been in providing opportunities for industrial training at certain points. Formerly no industrial education was provided for the Alaskan natives in the Territory. For many years the ordinary day schools of the one or two room type, with work mostly in the primary grades and all of an academic character, were the only schools available for the natives. In recent years about 500 young men and women of Alaska were attending schools two and three thousand miles from their natural environment in order to get industrial training. Some of them were removed from their homes at the age of 5 or 6, and never revisited Alaska until 18 or 20 years of age. A study of the situation revealed the fact that this policy was uneconomic and unwise. Many of these exiled natives found it difficult to adapt themselves again to their home environment; others remained in the States. In view of the fact that industrial and vocational education is more necessary for these natives than any other type of education, it is difficult to understand why an industrial program of education in Alaska has not been previously undertaken.

To meet the situation the Bureau of Education decided to provide at least three industrial schools at important points in Alaska. During the past fiscal year special industrial schools have been organized at Eklutna, 28 miles north of Anchorage, on the Alaska Railroad; at Kanakanak, on Bristol Bay; and at White Mountain, on Fish River, 25 miles from Golovin, on Norton Sound. These institutions have been located at strategic points covering in a great triangle all sections of Alaska. It is planned to locate a manual-training high school in southeastern Alaska at an early date. From the appropriation made available for the year ending June 30, 1925,

a number of buildings were erected in connection with the industrial schools, including a school building at White Mountain and a girls' dormitory at Eklutna. During the fiscal year 1926 it is planned to erect a school building, an industrial shop, and a boys' dormitory at Eklutna; an industrial shop and a girls' dormitory at White Mountain; and an industrial shop at Kanakanak.

This year about 200 students will be accommodated in the industrial schools. Ultimately, 450 students can be accommodated in the dormitories that are now completed or planned.

The course of study for these industrial schools must be devised for this specific purpose. Mere manual training will not suffice. The natives must be taught those things which will enable them to secure a livelihood. One of the great needs in all Alaska is better housing facilities for the natives. Carpentry and building instruction demand a prominent place in the curriculum. Proficiency in the use of woodworking tools will find a place in boat building, sled construction, cabinet and furniture work. As many natives have their homes along the rivers and coasts of Alaska, instruction in the operation and repair of gas engines, marine engineering, and navigation is a part of the course of study. Household management, home making, nursing, and sanitation for the girls are especially stressed. These basic courses, with animal husbandry of the reindeer, the tanning of skins, the carving of ivory, basket weaving, form the frame about which other courses are grouped and worked out. It is expected that these courses will attract mature men and women as well as the youth. The natives show remarkable deftness in weaving, carving, and other crafts. Unfortunately, because of the lack of opportunity for training, many of these crafts have died out. It is hoped that they may be revived. If the Government is to help the natives, it must help them to help themselves through self-activity and self-support. To that end each institution must be made a teacher-training school for the natives as well as an industrial school. This teacher-training idea is carried out when the more apt pupils from the various day schools scattered over Alaska are brought to these industrial schools to assist the regular teacher, assume some responsibility in the way of leadership, and organize classes, both regular and special, to give them the kind and type of training that will fit them to live most usefully and completely in Alaska.

Aside from the industrial program, general education for the natives of Alaska has been extended and improved during the past year. Four new schools were established or reopened, respectively, at Tetlin, Kanatak, Quigillingok, and Igloo. An additional district superintendent and six additional teachers were added to the service. A new course of study has been organized and will be put into effect in the coming year. The general educational program for the natives has been considerably improved by increasing the attendance and lengthening the school term. The extent of this improvement can be seen in the tabulation in the following paragraph.

During the fiscal year for which the following statistics will apply, 85 schools were operated in Alaska, with 157 teachers employed, including schoolroom teachers, superintendents, and principals. These teachers not only carried on educational activities, but in many cases were responsible for the relief of destitution, medical super-

vision in the area about the station, and supervision of the industries, including the reindeer. Including school buildings, teacherages, hospitals, and orphanages, there are in Alaska 116 Government buildings in this service, valued at $273,550, not counting the equipment, school supplies, and other miscellaneous property, such as lighting plants and radio stations in a few villages. U. S. S. *Bower*, some gas boats, etc., used in carrying out the Government programs. The educational statistics for the school year ending June 30, 1925, are as follows:

Total number of days in actual attendance	358,281.95
Total number of pupils enrolled during the year	3,912
Average daily attendance throughout the year	2,632.13
Percentage of attendance	69.25
Average number in the schoolroom each day	26
Number of schools open 180 days per year or more	6
Number of schools open 160 days or more, but less than 180 days	13
Number of schools open 140 days or more, but less than 160 days	33
Number of schools open 120 days or more, but less than 140 days	16
Number of schools open 100 days or more, but less than 120 days	19
Number of schools open 80 days or more, but less than 100 days	8
Total schools open less than 80 days	9
Total schoolrooms open	104
Average number of days in the school year	137.32
During the year there was spent for repairs on the school buildings and not counted as a part of the operation of the schools	$12,471.70
Spent for new buildings	$19,318.17

The total enrollment during the fiscal year 1925 was 3,912, with an average daily attendance of 2,632.13, making the percentage of attendance based on the total enrollment 69.25 per cent. This compares with an enrollment of 3,910, with an average attendance of 65.77 per cent for the fiscal year 1924, an increase in the average attendance for the fiscal year 1925 of 6.52 per cent. In considering the total enrollment and the average attendance for these two years it should be remembered that during 1925 the totals did not include the mission schools at Akulurak, Holy Cross, and Nulato, with a total enrollment of 325. The past year, therefore, has shown a decided increase in the total enrollment, the average daily attendance, and total days' attendance. The average length of term for the year ending June 30, 1925, was 137.32 days, as compared with 128.08 days for the year ending June 30, 1924, an increase during the past year of 9.24 days.

The school attendance

District	Total enrollment	Average daily attendance	Total days taught	Total days attendance	Per cent attendance
Northwestern	701	498.2	1,176.5	59,349.95	71.07
Seward Peninsula	678	469.75	1,832	62,122.8	69.28
Western	596	398.69	2,165	49,480.92	71.42
Southwestern	346	271.79	1,300	33,190.94	78.55
Central	506	318.63	2,287	43,332.05	62.97
Southeastern	1,085	675.07	2,748	110,805.29	62.21
Total	3,912	2,632.13	11,508.5	358,281.95	69.25

As indicated above, each teacher not only teaches the school but is a dispensing agent of the medical chest, a teacher of sanitation and health, and a village sanitary engineer. From the summaries made

from the reports submitted by the 104 schoolroom teachers in the Alaska service the past year the following welfare services were rendered:

The community service

District	Visits made to homes	Medical assistance rendered	Number births reported	Number deaths reported	Native population served	Number of teachers
Northwestern	1,339	2,797	53	32	2,119	20
Seward Peninsula	3,468	4,064	37	22	2,062	27
Western	2,905	7,459	54	37	2,050	30
Southwestern	918	1,836	31	28	956	20
Central	2,548	3,505	48	38	1,589	24
Southeastern	1,747	2,401	37	36	4,029	36
Total	12,925	22,062	260	193	12,805	157

The total days' attendance, the average daily attendance, the percentage of attendance, and other related statistics were also decreased materially on account of the diphtheria epidemic prevalent over the Seward Peninsula during the winter and spring of the school year, and the "flu" epidemic on the Bristol Bay district and along the peninsula toward the Aleutian Islands. In his final report on sanitary conditions in the northwestern district, Dr. W. H. Gage, physician and surgeon of the Bureau of Education, with headquarters at Noorvik, wrote:

> This has been the most exciting and important quarter of the year. The diphtheria epidemic at Nome naturally produced panic everywhere in the schools, as well as in the communities, and unfortunately during the period this entire district suffered a severe epidemic of sore throats. Tonsillitis prevailed generally, and many of the cases were of a very severe type. The native continually feared it was diphtheria.

Notwithstanding the closing of a large number of schools in the districts affected by the epidemics, there is an increase in the total enrollment over the previous year, and the average per capita cost was low.

Medical relief.—The medical work for the natives of Alaska has fallen short of what has been accomplished along educational lines. This deficiency arises principally from a lack of funds adequately to meet the situation. Hitherto medical relief has been extended to considerably less than one-half of the natives. Tuberculosis and other deadly diseases are ravaging the natives at certain points in Alaska practically without check. It has never been possible to secure appropriations to relieve natives suffering from tuberculosis. It is not practicable to handle these patients in the regular hospitals. Nevertheless medical relief has been extended considerably during the current year. Six additional nurses were employed and posted at the following points: Karluk, Kotzebue, Sitka, Hydaburg, and Juneau, while one nurse divided her time between the villages of Killisnoo and Angoon.

The physician formerly employed at Unalaska by the Board of Home Missions of the Methodist Episcopal Church having left that station, the Bureau of Education appointed a physician and sent him to Unalaska to render medical assistance to the natives of that region. During the winter months he is the only physician available within a radius of several hundred miles. The Coast Guard has

turned over to the Bureau of Education a building for his use as a residence and as a hospital for natives.

Isolation cottages of four rooms each for the accommodation of patients with contagious diseases have been erected at the following places: Two at Akiak, one at Eklutna, two at Juneau, two at Kanakanak, and two at White Mountain.

The need for medical relief for the people living along the Yukon and tributary rivers in the interior of Alaska is imperative. An antiquated hospital, housed in an old building erected for other purposes, located at Nulato on the Yukon, is the only available hospital in all this region. This antiquated building provides for only seven beds. There are about 6,000 persons living along these rivers, of whom 4,000 are natives. If adequate appropriations could be made available during the coming year, it would be well to establish one or more floating hospitals upon the Yukon and the tributaries during the summer months. If this could be done the hospital at Nulato could be abandoned and its personnel and equipment used toward establishing a floating hospital. If this is not done, it is highly desirable that the hospital at Nenana be equipped and manned so that relief may be extended to some extent in this region.

During the year ending June 30, 1925, the Government, through the Alaska division of the Bureau of Education, spent $126,382.20 for the medical relief of natives in Alaska, maintaining five hospitals, with a staff of physicians and surgeons, nurses, cooks, and orderlies at Noorvik, Akiak, Nulato, Kanakanak, and Juneau, and contractual relations with a number of other hospitals in Alaska as well as outside in Washington and Oregon. It employed and supplied 17 full-time village nurses in Alaska and supported four native nurses in training throughout the year, as well as a large number of teachers of sanitation. The last half of the year an itinerant dentist was employed to visit and render professional services to the natives in all the most important stations in southeastern Alaska and to the orphans in the industrial school and home at Kanakanak. A large number of native boys and girls were brought to Seattle for specialized treatments and delicate operations, and the blind and deaf were educated in special schools. One hundred forty-three orphans were cared for in the Government homes and industrial schools at Kanakanak and Eklutna, and many cases of distressed and destitute natives were relieved. The following services were rendered through medical relief:

Summary of reports made by nurses, teachers of sanitation, and doctors

	Nurses and teachers of sanitation	Doctors	Total
Number of visits to homes	5,854	----------	5,854
Number of patients treated	4,944	1,030	5,974
Number of treatments given	12,160	10,953	23,113
Number of births reported	31	64	95
Number of deaths reported	9	46	55
Total days of hospital care	----------	12,835	12,835
Out and clinic patients	----------	3,671	3,671
Out and clinic calls	----------	6,223	6,223
Total cost of medical service		$125,790.55	

Classification of diseases

	Treatments	Days hospital care	Total
Abscesses, ulcers, and boils	453	1,517	1,970
Appendicitis	3	454	457
Asthma	11	59	70
Breast-carcinoma, etc.	59	46	105
Burns and frost bites	201	765	966
Gonorrhea	25	99	124
Heart trouble	42	386	428
Hernia	8	142	150
Homeless children [1]	35	156	191
Infections	883	1,345	2,228
Influenza, pneumonia, grippe	1,041	2,768	3,809

	By nurses and teachers of sanitation	By doctors	Total
Kidney disorders	67	103	170
Malnutrition	21	36	57
Meningitis	3	63	66
Nervous system—mental	91	571	662
New born [2]		258	258
Pelvic disorders	53	399	452
Pregnancy, confinement	61	846	907
Rheumatism, neuralgia	417	506	923
Stomach and bowels	570	729½	1,299½
Surgical operations and dressings	837	1,231	2,068
Syphilis	288	788	1,076
Throat, tonsils, etc.	355	826	1,181
Trachoma	5	71	76
Tuberculosis	298	3,569	3,867
Undiagnosed—miscellaneous [3]	875	1,324½	2,199½
Violence—accidents	203		203
Total treatments and days care	6,905	19,058	25,963

[1] In orphanages at Kanakanak and Eklutna and no record of treatments given and not counted in totals.
[2] No reports given by nurses.
[3] Many minor ailments, colds, snow blindness; some uncommon and serious.

In addition to the usual work of nurses and doctors reported above, many times these medical employees rendered services out of the ordinary, such as washing clothing of children, directing the general clean-up of the village, digging of ditches to drain stagnant pools, demonstrating use of tooth brushes, proper fumigation, practical nursing, special mothers' meetings, demonstration of making oat meal, gruel, and barley water for sick children, burning rubbish, distributing chloride of lime, the use of vaseline, iodine, and castor oil in fishing camps, extraction of teeth, etc.

During the year a special nurse was appointed by the Commissioner of Education with special assignment to go aboard the *Boxer* and visit villages in the far north, making inspections of the children and holding parents' meetings and rendering whatever medical relief was possible. She left Seattle in June and returned the middle of November, and visited Sevoonga and Gambell on St. Lawrence Island, Shishmareff, Wales, Kivalina, Point Hope, Kotzebue, Noatak, Noorvik, Selawik, Wainwright, Barrow, Nome, and St. Michael. She inspected 500 children and reported the following:

Defective eyes	42	Defective throat	75
Defective ears	25	Defective skin	20
Defective teeth	160	Defective glands	178
Defective nose	97	Defective nutrition	57

Defective posture	139	Feeble-mindedness	1
Pulmonary tuberculosis	1	Pott's disease	2
Partial blindness	5	Corrections, teeth	21
Paralysis of arm	1	Corrections, throat	3
Harelip	2	Corrections, eyes	4
Enlarged thyroid	2		

In addition to these services this nurse performed distinguished service by assisting in the rescue of the crew of 20 men from the *Lady Kindersley*, which was caught in the ice and abandoned off the coast near Point Barrow.

From January 19 to July 31, 1925, the Bureau of Education had in its employ an itinerant dentist who visited most of the native villages in southeastern Alaska and the Government orphanage at Kanakanak on Bristol Bay. A summary of his report, submitted at the termination of his appointment, follows:

Station	Teeth pulled	Teeth filled	Teeth cleaned
Saxman	25	47	18
Hydaburg	64	106	67
Klawock	123	38	61
Wrangell	29	(1)	(1)
Kake	138	96	80
Angoon	76	13	38
Killisnoo	16	4	16
Sitka	210	14	80
Juneau	76	11	37
Douglas	23	6	12
Metlakatla	25	25	19
Ketchikan	38	42	35
Kanakanak	43	102	100
Total	886	504	563

[1] Referred to local dentist.

In this connection it must be remembered that the appropriation made by Congress is not large enough for the Bureau of Education to attempt to cover the entire field in Alaska with its educational program, medical and reindeer service. The total native population, according to the 1920 census, was 25,508, and the total population served in the villages last year was 11,158. It is evident that the field in which the Government might extend its beneficial influence is large.

Reindeer industry.—Originating in 1892 in importation of reindeer from Siberia to furnish subsistence for the Eskimos in the neighborhood of Bering Strait, the reindeer industry has expanded until it has assumed chief importance in the bureau's industrial activities in behalf of the natives. Herds are now found near all of the principal native settlements of western Alaska from the Arctic to the Pacific Ocean, in the interior near Mount McKinley National Park, along the Alaskan Railroad, and on Kodiak Island off the Gulf of Alaska, along the Alaska Peninsula, and as far west as the Aleutian Islands. So rapidly have the herds increased that the total number of reindeer in Alaska is now estimated at 350,000, of which about 235,000 are owned by the natives themselves. One of the principal problems confronting the Bureau of Education at this time is the reorganization of the reindeer industry on a cooperative basis so as to make it possible to handle more efficiently the increas-

ing herds and market the surplus meat. The reorganization will attempt to care not only for the distribution of the herds, as in the past, but for handling the industry on a business basis. The present commercial value of the Alaskan reindeer herds is approximately $8,750,000, or $1,550,000 more than the sum paid for the Territory by the United States in 1867. This does not take any account of more than 200,000 reindeer slaughtered in the past and used as meat by the natives, nor the great benefit derived by the natives through participation in this great industrial success.

U. S. S. "Boxer."—In April, 1920, the U. S. S. *Boxer*, a wooden vessel used by the Government as a training ship for naval cadets, was transferred to the Interior Department for the use of the Alaska division in connection with its work in Alaska. Funds have been appropriated and used to make repairs and remodel this schooner and equip it with modern machinery at a cost of approximately $100,000, and she is to-day a sturdy craft, braving the waters of the Pacific and Arctic Oceans as far north as Point Barrow. Annually she carries a heavy tonnage of supplies and equipment, teachers, doctors, and nurses to the coast stations and to the distributing points on the mouths of large rivers.

Activities of the Commissioner

During the year the commissioner traveled 43,444 miles; spent 137 days in the field, including Sundays; conducted 4 national educational conferences; addressed 25 national associations, 3 regional associations, and 12 State associations; visited officially 3 State departments of education; addressed several city and county educational associations; visited and addressed 15 institutions of higher learning and 6 summer schools; made 5 commencement addresses, 2 dedicatory addresses, and represented the Government on 1 inaugural occasion; addressed 3 high schools and 13 business organizations (chambers of commerce, Rotary, Kiwanis, and other clubs); making a total of 157 addresses before audiences aggregating 87,410. (See fig. 3.)

The commissioner attended meetings and discharged duties as vice chairman of the Federal Board for Vocational Education as a member of the Federal Board for Maternity and Infant Hygiene, and as chairman of the Federal Council of Citizenship Training. He wrote 36 articles and held about 310 conferences in his office in Washington with those seeking advice and assistance in educational matters.

Recommendations

I have taken occasion to indicate in previous reports that the research facilities of the Bureau of Education should be considerably enlarged. Those responsible for school administration in the United States are in great need of assistance in certain important fields. The facts must be discovered before a sound educational method and policy can be formulated. No other agency can render such impartial and satisfactory assistance in the discovery of the necessary facts as a Federal agency in education, such as the bureau.

At the present time adequate provision is direly needed for study in the fields of curriculum organization, school finance, buildings and construction, teacher training, and secondary education. The

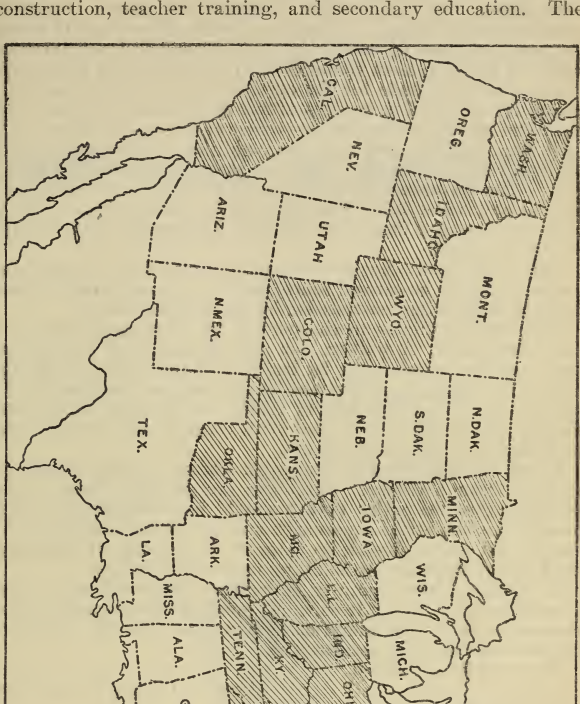


FIG. 2.—Map showing the States in which the Commissioner of Education personally has made educational addresses, visited schools, conferred with educational organizations, or rendered any other kind of field service during the fiscal year 1924–25. During the year the Commissioner traveled 33,444 miles.

establishment of the various types of service is dependent upon additions to the sums appropriated for the bureau's operations.

The work of the bureau in Alaska should be expanded. The Alaska service at present is available to less than half the native population. The need for extended medical assistance is peculiarly

great. Medical relief is now furnished a small minority of the natives and there is practically no provision for the treatment of tuberculosis, which is rapidly ravaging the native population in certain parts of Alaska. Along the Yukon River and its tributaries are large numbers of natives to whom no medical assistance can be rendered under present conditions. To furnish such assistance provision should be made for the operation of a medical boat on these rivers during the four months of the open season and the establishment and operation of a hospital either at Nenana or Tanana. These additional facilities will require an addition to the appropriation for medical relief in Alaska of not less than $40,000 for the next fiscal year. The Governor of Alaska estimates that there are about 4,000 natives and about 2,000 white people in this area, many of whom have never seen a doctor or dentist. The need for this additional service is urgent.

Three industrial schools have been provided for, but the industrial program should be carried much further, as vocational education is the type of training most needed by the Alaskan native.

The funds available to the bureau for printing should be materially increased. A well-trained and efficient staff has been assembled, but their work must be fruitless to the extent of the lack of means for informing the educational public of the results of their studies. The steady reduction from year to year in the amounts allotted to this office, combined with constant increase in costs, has been already a serious detriment.

About two-thirds of the bureau's library is still housed in the Pension Office Building. The books are accessible, but it is highly desirable that the entire library should be consolidated as early as possible for the better supervision and use of the collection. I hope that it will prove possible to transfer the balance of the library to the Interior Department Building in the near future.

In closing I wish again to express my appreciation, sir, for the interest, support, and advice which you have so generously rendered during the year. The emphasis that you have placed upon our work has been encouraging and helpful.

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1926

WASHINGTON
GOVERNMENT PRINTING OFFICE
1926

THE BUREAU OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIAM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D.. LL. D.
July 1, 1906, to June 30, 1911

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to date

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REPORT OF THE COMMISSIONER OF EDUCATION

Department of the Interior,
Bureau of Education,
Washington, D. C., September 1, 1926.

Sir: I have the honor to submit the following report of the operations of this office for the fiscal year ended June 30, 1926, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

Preliminary Statement

Service to public education in the United States is the foundation upon which the United States Bureau of Education rests. It was created "for the purpose of collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."

The functions of the Bureau of Education are twofold:

I. *Nonadministrative functions*, which consist of (1) research work and the collecting of information on all matters relating to education in the United States and foreign countries; (2) dissemination of such data; (3) the promotion of education generally.

II. *Administrative functions*, which embrace (1) administration of income accruing from lands under the first Morrill Act and annual appropriations under the second Morrill Act and Nelson amendment; (2) administration of a system of education, support, and medical relief for the natives of Alaska.

For the more effective prosecution of these functions, the bureau is organized into two general departments or activities, with the following divisions:

(1) Technical activities: (a) Higher education; (b) rural schools; (c) city schools; (d) physical education and school hygiene; (e) service, which comprises adult education, industrial education. commercial education, home-economics education, educational legislation, and foreign education.

(2) General service activities: (a) Statistics; (b) editorial; (c) education, medical relief, and reindeer service for the Alaskan natives; (d) library; (e) stenographic; (f) mails and files; (g) messenger service.

The functions and activities of the technical staff of the Bureau of Education fall into several classes, as follows: (1) Research and investigation; (2) educational surveys; (3) dissemination of information; and (4) field service.

The results of the bureau's studies are made available to school and college administrators and teachers in a variety of ways, including especially bulletins and circulars, which are distributed as soon as they come from the press. At the same time, the members of the bureau, in public addresses or by correspondence, use every opportunity to inform the public on educational matters.

In the conduct of surveys members of the bureau's staff have occasion to visit widely separated parts of the country. These studies often require extended absence in the field. At the same time the bureau's specialists conduct frequent educational conferences in various parts of the country. Also, they are called upon, from time to time, to deliver addresses before educational associations, student assemblies, and public gatherings. A large proportion of the travel expenses incident to this service in the field is borne by local, State, and national organizations. The bureau is anxious to render these various forms of field service to all sections of the country on an equal basis.

Summarizing all types of field service, I may report that during the fiscal year 21 members of the bureau staff, exclusive of the commissioner, rendered an aggregate of 783 days of field service outside of the District of Columbia in 39 different States.

As one feature of this service, 16 members of the staff, exclusive of the commissioner, delivered 123 addresses in 29 different States to audiences aggregating 28,662 persons.

It has been the custom in previous annual reports to outline the activities of the bureau under the heads of the different divisions of the office, which often resulted in the overlapping of material. In this report the work of the bureau is, with a few exceptions, presented under topics. In addition to the foregoing I have given some of the outstanding events in the field of public education during the year, which should prove of interest not only to schoolmen but to the general reader.

I. Review of Recent Events in Public Education

STATISTICS OF EDUCATION

Data for the school year 1923–24 show 564,363 pupils enrolled in public kindergartens; 54,456 in private kindergartens; 20,898,930 in public elementary schools, including kindergartens; 1,473,145 in private and parochial elementary schools, including kindergartens; 3,389,878 in public high schools; 254,119 in private high schools; 61,858 in preparatory departments of colleges and universities; 35,232 in secondary courses in normal schools; a total of 3,741,087 in secondary schools; 245,669 in teacher-training schools; 664,266, excluding preparatory students, in colleges, universities, and professional schools. Private commercial and business schools report 188,368 students in 1925. If enrollments in industrial schools for delinquents, schools for the deaf, blind, and feeble-minded, as given for 1922, and enrollments in schools for Indians, and for schools in Alaska are included, a total of 27,398,170 is secured. There are approximately 1,000,000 teachers for all of these schools.

Including outlays the public elementary schools cost $1,231,554,330 and the public high schools $589,189,606. The private elementary

schools are estimated to have cost $86,812,435 and the private high schools $44,145,553. Receipts for colleges under public control amounted to $151,781,079 and for those under private control $189,203,947. Teacher-training institutions expended $22,474,818. If to these amounts there are added the costs of industrial schools, schools for the blind, the deaf, and the feeble-minded for 1922, and for schools for the Indians and for Alaskans, the total is $2,386,889,132.

Public elementary and high school property is valued at $3,744,780,714 and private high-school property at $396,616,100. Private elementary school property is estimated to be worth $300,000,000. Teacher-training institutions have property valued at $136,623,958 and colleges and universities at $1,056,929,060, excluding endowments. Teacher-training institutions have endowments and productive funds valued at $12,862,722 and colleges and universities at $814,718,813. The total value of school property as reported above is $6,462,531,367.

It is difficult to determine the number of elementary schools, as localities define the school in so many different ways. There were in use in 1924 a total of 263,280 public elementary and high school buildings, of which number 157,034 were one-room schools. There are approximately 22,500 public high schools, 2,500 private high schools, 89 teachers' colleges, 114 State normal schools, 29 city normal schools, and about 67 private normal schools. There are 144 colleges and universities under public control and 769 under private control.

The ratio of adults—that is, persons 21 years of age and over—to school children, those 5 to 17 years of age, inclusive, is 2.20 for the United States. For the western group of States it is 2.68; for the North Atlantic, 2.52; for the North Central, 2.44; for the South Atlantic, 1.71; and for the South Central, 1.65. A child in the western group has one more adult to support him in school than does a child in the south central group. Per capita wealth and per capita incomes are higher in States having relatively fewer children. This unequal distribution of children, of income, and of wealth is one of the big problems in financing our State educational systems.

RURAL EDUCATION

There has been relatively little legislation of special interest in the field of rural education during the year, owing to the fact that the majority of legislatures meet in the odd rather than the even numbered years. The time has been used to advantage in many States in preparing the people for a better understanding of such legislative changes as are contemplated to be made by the 1927 legislatures and in making preparatory studies anticipating advanced organization or administration provisions.

Particularly noticeable has been the movement on the part of teachers in service and persons preparing for teaching to secure the professional and academic training necessary to comply with new laws requiring certain prerequisites for teaching certificates. In general, the amount of training required increases year by year. Rural-school teachers are affected more by these laws than are those of cities. They are going to summer schools and attending regular courses in large numbers. School officials concerned with the enforcement of the laws are actively engaged in enlarging and improv-

ing facilities for training prospective teachers and those in service, particularly for observation and practice.

Unusual interest has been shown during the year in an effort to give practical help of a professional nature to rural-school superintendents and supervisors. This interest is apparent in three obvious movements: (1) The establishment of "short courses" for superintendents and supervisors in service. These are from three days to two weeks in duration and are provided and promoted by State departments of education and higher institutions of learning. (2) Increased effort on the part of State education officials to provide practical assistance to rural superintendents and supervisors by the assignment of members of the State education department staff to a larger amount of field work with the local superintendents and supervisors to assist them in the solution of local problems; North Dakota, Texas, and Minnesota are examples of States which have shown special interest in these movements during the year. (3) The establishment in higher institutions of courses in rural-school administration and supervision both during regular year and summer-school sessions. These follow in part the demands of newer laws providing for special certificates for supervisory and administrative positions.

In the field of rural-teacher preparation there are marked tendencies apparent to discontinue courses designed for the preparation of teachers in schools of secondary grade, as in North Dakota, Oregon, and Oklahoma; to raise entrance requirements to high-school graduation where such courses are continued, as in Wisconsin and North Carolina; to establish new departments in normal schools for the training of rural teachers, as in Arizona and Missouri; to enlarge the staffs in rural-teacher-training departments; to provide more differentiated courses for rural teachers; to provide more adequate observation and practice facilities; and to increase the amount of professional training required for completion of courses.

In the field of secondary education the extension of the reorganization movement to rural areas continues. This is indicated by the fact that of a total of 2,458 high schools reorganized, reported to the Bureau of Education for 1924–25, 1,215 are located in places of less than 2,500 total population; 893 of these are of the junior-senior type. Among the States which report progress in the junior-senior type of school organization in rural areas are Alabama, Indiana, Iowa, Michigan, Ohio, Oklahoma, Pennsylvania, Vermont, and West Virginia.

The movements for setting up larger units for administrative organization and for consolidating small schools are making constant and substantial progress. Both elementary and secondary schools are affected through professional management, the enrichment of the curriculum, securing teachers with specialized training, better support, better teachers, and better facilities in general. Progress in consolidation and centralization has been marked more by improvement of internal organization than by new provisions for larger units. There has been more intelligent planning for the reorganization of rural districts, replacing haphazard plans based on enthusiasm more than intelligent care in organization. Better provisions for safe transportation are being made, and as roads improve the type of school busses used improves. Recent changes

in laws concerning consolidation deal in large part with improvement in organization and transportation. There is an improvement also in the type of reports being collected and the accuracy with which data are collected. As an example of this, the Bureau of Education collected in 1918 transportation data from 18 States; in 1925 all but two States included transportation items in their reports Approximately 1,000 consolidations were effected during the year, either by voluntary uniting of small administrative units or by promoting better administrative practice within large units already formed.

Probably the most promising progress during the year has been that toward improving the quality of instruction made possible by better organization, more professional management, employment of supervisors, and better trained teachers for rural schools. Improved and increased professional interest is manifested in the fact that schools of education in colleges as well as normal schools and teachers' colleges are providing advanced training for administrative and supervisory officers, including principals, in the field of rural education; that a larger number of research studies than usual have been undertaken during the year reported from graduate students in education as masters' and doctors' theses, and undertaken by principals, supervisors, superintendents, and officials in State departments of education.

The year has been characterized by a marked increase in interest in the supervisory work of elementary principals in rural communities and in studies of the kind of materials suited to individual needs of young children. Special provision is being made in a number of States through the State education departments, through special supervisory conferences and State teachers' associations, for the improvement of supervisors in service. A better understanding of the function of supervision itself and of the respective functions of State and county supervisors is apparent. State departments are working toward the establishment and maintenance of standards in rural supervision and are promoting systematic supervisory programs and a more equitable distribution of the supervisor's time.

Studies of the rural-school curriculum have received unwonted attention during the year. Special studies now in progress concerning problems relating to the course of study include (*a*) the bearing of basic educational tendencies upon the rural elementary curriculum, (*b*) the next steps in rural elementary curriculum making, and (*c*) specific contributions to the formulation of courses of study by specialists in the different fields of elementary education.

Several notable contributions have been made to the literature in the field of rural education. There has been increased interest in county library systems, in library instruction for rural teachers, and in the preparation of book lists based on children's interests and graded according to children's reading abilities. Last year library instruction was given in seven teachers' institutes in New Jersey. State teachers' colleges in Indiana, North Dakota, and Pennsylvania reported courses for teacher-librarians in last year's summer sessions. The State school librarian of Ohio held one-day county institutes for the purpose of giving instruction in the organization of school libraries. At least two States have increased their appropriations for rural-school libraries during the year.

By way of promoting better standardization regulations for rural schools Idaho and Ohio have revised their score cards; Vermont has increased its appropriation for State aid; Missouri and Oklahoma have made arrangements for more careful checking of schools applying for standardization.

The movement to promote parent-teacher organizations in rural communities has received a marked impetus during the year. A state-wide campaign for the establishment of an organization in every rural community carried on in North Dakota this year has been sufficiently successful to attract the attention of other States and to provide an incentive for at least two States—Mississippi and Nebraska—to request similar organized campaigns in their States the coming year. Systematic efforts to conduct worth while programs in all the organizations have been made. North Dakota's experience is that the organizations have been conducive to an intelligent understanding of school problems and to cooperation between school officials and the people for advanced school programs, influencing legislation, tax rates, bond issues, and the like.

CITY SCHOOL SYSTEMS

Without doubt the education of city children is one of the most important problems facing the educational world, and its solution becomes more and more pressing as the population drifts constantly toward the cities. The growth of cities in this country has been phenomenal. In 1790 there were only 6 cities of 8,000 or more population in the United States. In 1850 there were 85 such cities, but only one-twelfth of the total population was living in these cities. In 1920, however, there were 2,787 cities of 2,500 or more population and half the population was living in them. In 1890 there were only 28 cities with a population of 100,000 and over, but in 1920 there were 68 cities of this size and 26 per cent of the total population was living in them.

In 1920 there were 19,436,202 children from 1 to 19 years of age living in cities of over 2,500 population. In other words, more than 45.16 per cent of all the children in the country from 1 to 19 years of age are living in cities. How these children are educated is vitally important, not only for the present generation but for the whole future of the country.

The city as it exists to-day does not satisfy the fundamental needs of children. Children need to play, but it is a rare city that has adequate play space for its children, so located and supervised that it is easy for all children to play under wholesome conditions. The result is that a large number of children in the cities play in the only available place, i. e., the city streets. Last year nearly 6,000 children were killed on streets and highways and 151,000 were injured. Children need to have the chance for constructive, creative manual work, but there is small opportunity or need for such work in the average city home. Children need first-hand contact with nature—the earth and sea, birds, flowers, trees. Children are natural scientists and this is the kind of subject matter upon which they should have the opportunity to feed their curiosity. Each generation needs these contacts with the actual physical world for the sake of its own growth and the preservation of the race. But the city,

with its pavements and brick and mortar, is starving rather than nourishing this curiosity about the physical world.

Probably one of the most serious aspects of city life for children is that it tends to build up habits of cheap amusement, cheap and undesirable ways of using their leisure time. According to the findings of modern psychology, the way in which people spend their leisure time is of vital importance in their whole character development, and the use of their leisure time depends to a large extent upon the habits of taste formed in childhood. It is for this reason that educators are now realizing that city schools must not only teach the three R's but must counteract the effect of city life upon children by helping them to form tastes for worth while use of their leisure time through opportunities for hearing good music and seeing fine works of art, taking part in producing and seeing good plays, hearing interesting lectures which broaden their horizon.

That conditions have changed in our cities and that a curriculum prepared only a few years ago no longer meets the needs of modern city life has been fully recognized. The reorganization of the curriculum and the necessary assembling of proper materials of instruction attendant thereto is, therefore, receiving more of the attention of educational leaders at the present moment than any other school problem. The Bureau of Education is endeavoring to be of assistance to those attempting a solution of this important problem. One of our specialists has prepared from time to time a series of type studies on modern life and the elements of social science based directly upon the child's need and interest as related to present-day civilization. The latest of these studies is a bulletin entitled "How the World Rides," and consists of a series of projects on vehicular transportation for pupils in the elementary schools.

Reports of the reconstruction of the elementary-school curriculum to include these new materials of instruction have filled the programs of our educational meetings in recent years and have become the pivot upon which most of the discussions at these meetings have swung. New courses of study from city-school systems and from State departments of education now being issued evidence the avidity with which these changes are being written into curricula.

Committees[1] are being appointed within the school system composed of officers and teachers who are on leave for days, months, and sometimes for a year in this service. Thousands of dollars are being spent to cover extra expenses for substitute teachers, research, and tabulation of material. Often suggested lessons are carried into the schoolroom and are tried out by a gifted teacher to preclude any doubt of the practical application of the new curriculum to the everyday program.

We may rewrite the courses of study, we may inject into them the elements of social science and the problems of modern life, but unless the teacher herself is prepared to organize this material and to use it rightly she will necessarily discard it eventually and will continue to confine her training of children to the acquisition of skills, still ignoring the golden opportunity which the new curriculum offers—"the equipment of the child for his life work."

[1] See Department of Superintendence Official Report, 1925, p. 170.

For, after all, the elementary-school curriculum is for the child, and not for the teacher, the principal, or the superintendent. Nor is it designed for the mature men and women who gravely sit on committees and decide what a little child shall study; nor yet for the erudite professors of education who discuss its values and have long since passed into another realm of thinking and feeling from that enjoyed by children in the elementary schools.

Our problem then in curriculum reconstruction is to determine what is being done effectively in our progressive schools. Not theory but actual practice should be offered by these framers of the new curriculum, practice that extends through many years of the child's school life and that has been justified by test and measurement.

The elementary-school curriculum in the cities of the country has been reorganized so as to give more time to play, physical training, drawing, music, the industrial arts, and to the content subjects so as to meet modern city conditions. The relative amount of time given to the three R's has diminished from 57.55 per cent of the total weekly time allotment in 1904 to 50.58 per cent, while the content subjects, such as history and geography, have increased from 14.42 to 15.53 per cent, and the special subjects have increased from 27.97 to 33.89 per cent. If, however, the increased school year is taken into account the three R's receive practically as much time as they ever did.

Various plans whose aim is to help solve the educational problems of the modern city have been introduced into some of the schools of the country. One of these is known as the work-study-play or platoon plan of organization, which makes possible an enriched curriculum of music, art, physical education, manual training, etc., without affecting results in the three R's and without increased cost.

This plan is being rapidly adopted by the cities of the country. In 1914 there were nine cities in six States which had schools organized on the work-study-play or platoon plan. In June, 1926, there were 110 cities in 33 States having such schools. In other words, in the past 12 years there has been a 1,122 per cent increase in the number of cities having this type of school organization. The 110 cities have a total population of over 17,000,000. Not only has the number of cities adopting the plan increased, but there is a tendency to increase the number of schools on the plan in cities where it has been tried. For example, there are now 34 cities with a population of 5,988,607 which have organized all their schools on the plan, or have adopted it as a city-wide policy. Of these 34 cities, 22 already have all their schools on the platoon plan.

In the opinion of superintendents who have organized schools on the plan, its rapid growth is due in large measure to the fact that under the plan it is possible, financially and administratively, to give to all children in a school system the opportunities for an enriched curriculum of work and play and study which the development of cities has made it imperative to provide for city children. They contend that changed social and industrial conditions have created a new educational problem—that of making cities fit places in which to bring up children.

As one of the attempts to help solve the educational problems created by the modern city, the work-study-play or platoon plan is

worthy of careful and scientific study. The bureau has been making such a study in response to a widespread demand for information on the subject. During the past four years requests for information have been received from over 1,800 people, only 112 of whom were laymen. Three hundred were school superintendents, 722 were principals of schools, and 243 were teachers. Requests were also received from 13 foreign countries, including England, Estonia, France, Holland, India, Japan, New Zealand, Sweden, and Switzerland.

Modern education considers work with pre-kindergarten, kindergarten, and primary school children as a unit. Evidences of the growing acceptance of the idea of a unified educational experience for young children are the increasing number of combined kindergarten-primary teacher-training courses, and of the introduction into these courses of work to familiarize the student with the interests and activities of infants and children from 2 to 4 years of age. Further application of this unit idea is found in the adjustment of city school administration to place the kindergarten and primary grades under one supervisor, and in at least four representative cities nursery schools are being made an integral part of the school system.

Further outstanding illustrations of interest in this unification throughout the educational field are the enlarging of the journal of the international kindergarten union to include sections of particular interest to nursery-school workers as well as to kindergarten and primary teachers, and the organization of a kindergarten department in the National Education Association, with provision for representing nursery-school interests in its research problems and convention programs.

Experimental stations for studying the mental and physical welfare of young children are increasing in number. Habit clinics, which are a vital contribution, are also being added. Here parents and teachers alike may refer children of all ages for examination and may expect advice which will be of value in the education of the children.

Perhaps the most outstanding characteristic for the past year in the field of education for young children has been the desire to coordinate the work of the entire period of childhood, the unified effort to arouse and further the interests of parents in all phases of their children's development, and the need expressed by teachers and educational administrators for scientific investigations, the results of which should be guides in curriculum building, in program adjustments, and in record keeping.

To meet this modern tendency toward unification in education and to provide guiding and helpful material through research the former kindergarten section of the city school division has been enlarged to include nursery and primary school work.

The movement to reorganize the school system, with six years in the elementary-school and six years in the secondary-school grades, continues without abatement in all classes of cities throughout the country. The larger cities have almost uniformly adopted the 6–3–3 form of organization, but in the smaller cities there is no such uniformity or practice. In some of the smaller cities the schools have been organized on the 6–2–4 plan, some on the 6–3–3 plan, and others on the 6–6 or undivided secondary-school plan, which seems to be gaining in favor, especially in the smaller places.

Whatever the form of organization the aim should be to provide courses of study better suited to the needs of modern city life and to the needs of children from 12 to 18 years of age. The aim of the early part of the secondary-school course, the junior high school, is to provide general courses in mathematics, physical science, social science, languages, manual arts, etc., so as to permit the pupils to explore their interests, aptitudes, and capacities. Such exploration permits a pupil to elect more wisely when he enters senior high school, and for the pupil who leaves school at the end of the ninth grade the general courses are of greater practical and cultural value than was the drill upon the three R's in the old-time grammar school, which is passing away for the newer type of organization.

Not only the fact that the schools should adapt themselves to changed and changing economic and social conditions but also the fact that schools must adapt their work to individual pupils is being recognized more and more. That children differ in ability to progress through the grades has long been known, and numerous attempts have been made to break up the "lock-step" system of grading and promotion. At present several such plans provide for individual differences, such as the homogeneous grouping of pupils and the Dalton and the Winnetka plans, all of which need to be experimented with further before certain questions regarding them can be satisfactorily answered.

It is gratifying, however, to know that such experiments are under way in various cities of the country, for it is only by experimentation and the testing of results that we may hope to make any substantial progress in education.

One of the encouraging signs of progress in the administration of city-school systems is that questions of school policy are no longer settled entirely upon the basis of mere opinion, if any data are to be had on the question. Not content to depend upon opinion alone and upon guesswork, city school boards are establishing research bureaus to collect, compile, and interpret data regarding practically every phase of their respective school systems. There are now about 120 such bureaus, and the number is rapidly increasing.

Other outstanding movements to better the city-school systems of the country might be mentioned. Among these is the recent movement to raise the professional qualifications of elementary-school teachers. Many cities have adopted a single-salary schedule which provides the same pay for the same preparation and experience without reference to the grade taught, whether it be in the elementary grades or in the high school.

PHYSICAL EDUCATION AND SCHOOL HYGIENE

The past year has seen further emphasis on health as of first importance in education.

It is easy to state beliefs as to general policies in education. It is another thing to change theory into practice, especially in a ponderous organization such as our public schools where already the time has been fully occupied by subjects the importance of which is firmly rooted in the time and attention given them. Nevertheless, after more than a half century of agitation on the subject, health

work is rapidly being introduced as an essential feature of school work. In speaking of the revision of the curriculum for elementary schools in New York City, Superintendent O'Shea said: "In my opinion, health education is one of the fundamental aims of a modern public-school system," and this aim he places first in the reconstruction of their school program.

In secondary schools all over the country there is, in most quarters, a hiatus in adequate health examinations and health teaching, but the past year has seen the completion of studies which will at least furnish high-school principals with information as to methods of organizing and promoting work along these lines.

It is characteristically human to begin things at the wrong end, and such has been the case with school health work, which was commenced a half century since with college students and has but recently found its way to the preschool child. The past year has been notable for the work of the parent-teacher and other associations in impressing upon parents the importance economically, as well as educationally, of preparing the child physically for his entrance upon his school career.

There has been no important legislation for school health work during the year (33 States already have general laws requiring such work in all schools), but another State has been added to the list of those which have wisely headed their health work with a State supervisor. With the addition of Florida there are now 15 States with such general directors of health and physical education, and these States include half the school population of the country.

Notable among local changes in school health administration has been the transfer in Providence, R. I., of the medical inspection from the department of health to the department of education. This is the more significant in that the medical inspection in this city has been highly organized and wisely managed hitherto. This is a logical change, for while medical inspection in public schools began in the department of health, for the purpose of better control of communicable disease, it has, where more recently developed, been taken over by the department of education and linked with the general scheme of health education for which it serves as an objective foundation. Medical inspection began in this country in Boston, but in 1915 this work was transferred from the department of health to the department of education. Providence adds another name to the increasingly high percentage of cities in which this work is made one with the other health work of the schools.

Studies of the health service rendered their students by the colleges have been conducted the past year. That which was made by the Association of Deans of Women has been issued. That by the Committee of Fifty on College Hygiene, appointed by President Harding, has not yet been published.

Studies in school lighting have resulted in the issuing of bulletins on this important subject by the United States Public Health Service, by the Eyesight Conservation Council, and the National Committee for the Prevention of Blindness.

There has been considerable study in the past few years of the local incidence of goiter among school children, and in a number of communities the deficiency of iodine in water or food to which this

condition is believed to be due has been compensated by its supply to the pupils. The effect of goiter on mentality and on school progress was studied in one grade in the schools of Cincinnati under the direction of the United States Public Health Service. There seemed to be no evidence that the children with thyriod enlargement were retarded

ADULT EDUCATION

There has been unusual activity in the field of adult education during the year just closed. The American Association for Adult Education was organized after several regional conferences in different sections of the country were held, these conferences having been called by the Carnegie Corporation of New York. The purpose of this association is to aid, by cooperation and coordination, the activities of the national and local organizations which have as their objectives the education of adults. In addition, a number of State meetings have been called to consider problems in this field. At a special conference held in Washington in February, 1926, plans were discussed and resolutions adopted for dealing with the illiteracy question and with the instruction of the foreign born. There has been much comment in the public press concerning the scope and purpose of adult education both in this country and in Europe.

INDUSTRIAL EDUCATION

An outstanding event of the past year in industrial education was the amalgamation of the National Society for Vocational Education and the Vocational Education Association of the Middle West, forming the new American Vocational Association. This will unite into one national organization the efforts of all those interested in promoting the work of industrial education as well as vocational education in general.

Much interest has been manifested during the year in developing plans of school buildings for particular types of schools and courses. The erection of the new building to house the Denver, Colo., continuation school is an example of the emphasis placed upon construction to meet specific requirements.

Considerable interest has also been shown in the organization of courses to meet the needs of those who have decided to enter industrial schools but who are either too immature to start specific trade-training courses or who have not come to a decision as to the specific trade they desire to take up. The organization of a "Tryout division" in the Essex County Vocational School for Boys, Newark, N. J., and the "General shop department" of the William Hood Dunwoody Industrial Institute, Minneapolis, Minn., are examples of this tendency.

COMMERCIAL EDUCATION

Two of the most significant events in commercial education during the past year were the programs of the National Association of State High-School Inspectors and the Department of Business Education of the National Education Association, devoted, respectively, to ad-

justment of commercial education in the small high schools to the needs of the smaller communities and to research.

A number of contributions to commercial-education literature have been made during the past year. Many research studies have been reported, some of which have come from Europe. A number of cities and States have issued new commercial courses of study. Additional textbooks seeking a closer adjustment of commercial education to the junior high school have appeared. At least two surveys of opportunities for initial employment for commercial students were started during the year.

The need of city and State supervision of commercial education has been emphasized in many commercial teachers' conventions and in magazine articles. Many times as many States have made provision for State supervisors of trades and industries, agriculture, or home economics as have made provision for State supervisors of commercial education. The situation in the cities is almost identical. However, next to the enrollment in the academic courses, the enrollment in the commercial courses is the largest in the field of secondary education. In fact, the enrollment of pupils in public high schools by courses of study, 1923–24, reveals that the enrollment in the commercial courses exceeds the combined enrollment in all of the following courses: Agricultural, home economics, teacher-training, industrial or trade training, technical or manual training, and military drill. The commercial subjects that are offered these students have greatly increased in number and have become quite diversified in character. Efficient supervision of commercial education is desirable in the development of a city or State program to provide the teachers with a leadership in professional improvement, assistance and guidance in determining objectives, content, organization, and methods. The consensus of opinion is that adequate supervision of commercial education would be an economy.

During the past year the universities have taken an increased interest in the training of commercial teachers, and additional courses for commercial teachers have been offered. There has been considerable revision of curricula and expansion of facilities for training by the university schools of commerce.

LIBRARY ACTIVITIES

The current year 1926 is notable in library circles as the semicentenary of three events occurring in 1876 which marked the inauguration of the modern library movement, namely, the organizing meeting of the American Library Association at Philadelphia, October 4–6; the editing and publication by the Bureau of Education of the fundamental report on public libraries in the United States of America—their history, condition, and management; the establishment of a professional periodical, the Library Journal, which is still published. The annual conference of the American Library Association to be held this year will commemorate this anniversary, which is to be further observed by the completion of a series of anniversary publications, comprising reports of a general survey of American libraries, on adult education, and on library ex-

tension, and the American Library Association catalogue of books, 1926; also by a library exhibit at the Sesquicentennial Exposition.

The Carnegie Corporation of New York has set aside $4,385,000 for library purposes, payable over a 10-year period, to be distributed as follows: To establish and endow an advanced gradute library school, $1,385,000, which was awarded to the University of Chicago. In addition, $1,000,000 is to provide an annual income which will be used to aid existing library schools. Of the remainder, $1,000,000 is for general endowment of the American Library Association, the income to be used by the association in promoting the extension and development of library service. Another $1,000,000 will be used in carrying on the general activities of the association and in aiding library schools until the $3,000,000 endowment in cumulating capital grants is completed.

The year was signalized by a marked enlargement and improvement of facilities for professional library training, a movement which was fostered by the American Library Association's board of education for librarianship. The New York State Library School at Albany and the Library School of the New York Public Library were combined to form a school library service in Columbia University. The graduate library school to be established on the Carnegie endowment at the University of Chicago has already been mentioned. Beginning in September, 1926, the University of Michigan will offer advanced cources in library science. The completion of the $5,000,000 Hampton-Tuskegee endowment insures the development of the recently established library school for the training of negro librarians at Hampton Institute, Va.

Much attention continued to be given to the development of the public library as an agency of adult education. The commission on the library and adult education established by the American Library Association is engaged in the study and promotion of this development.

A number of notable library buildings have recently been completed or are planned for erection in the near future. Of city public libraries the new buildings at Los Angeles, Cleveland, and Philadelphia are especially worthy of mention. The plan of divisional reference work now in operation in the Cleveland Public Library is a new phase of educational service which is attracting particular attention. At Yale University construction is about to begin on the great new Sterling Memorial Library, to be completed in two years at a cost probably to exceed $6,000,000.

The American subscription of $1,000,000 to restore the library building of Louvain University in Belgium was completed by December, 1925, and it is stated that the total now assured will not only restore the library but provide a trust of $125,000 for its upkeep. The Carnegie Corporation also provided funds to erect the Gennadeion, a building for the library presented by Joannes Gennadius to the American School for Classical Studies at Athens.

The Carnegie Corporation is financing a study of university libraries as administrative units, which is being made by Dr. George A. Works, of Cornell University, associated with Chancellor S. P. Capen, of the University of Buffalo. Librarians are cooperating with this study in an advisory capacity only.

II. Work of the Bureau of Education

A. GENERAL

1. Research

(A) STUDIES COMPLETED

Research and investigation form an integral part of the bureau's activities. During the year the following studies were brought to completion:

Higher education.—Civil engineering curricula, published in the Journal of Engineering Education, April, 1926; (2) mechanical engineering curricula, published in the Journal of Engineering Education, May, 1926; (3) residence and migration of college and university students, 1922–23; (4) Latin and Greek in college entrance and graduation requirements; (5) physics in college entrance and graduation requirements; (6) cooperative study on religious education; (7) accredited higher institutions; (8) current statistics of State universities and colleges, 1925–26; (9) statistics of land-grant colleges for the year ended June 30, 1924; (10) statistics of land-grant colleges for the year ended June 30, 1925; (11) engineering enrollments for 1925–26; (12) bibliography of psychological testing in secondary schools.

Rural education.—(1) Bibliography of research in rural education, in cooperation with the department of rural education of the State College of Agriculture, Cornell University, representing a subcommittee on research from the department of rural education of the National Education Association; (2) study of State courses of study recently issued in the United States; (3) bibliography of secondary education research; (4) survey of the literature since 1920 and other available material preparatory to making a study of library facilities for rural schools in the United States; (5) summary of statements of State superintendents on important issues in rural education; (6) time distribution of supervisors in the Southern States, prepared for the Nashville conference of supervisors; (7) progress in the 11 Southern States comprising the Southern Confederacy, for the years 1875, 1900, and 1922; (8) tentative suggestions for the establishment of a four-year curriculum for the preparation of rural teachers; (9) entrance requirements for normal schools and teachers' colleges; (10) list of recent books and pamphlets on rural education recommended for rural social workers, prepared at the request of the American Country Life Association.

Mimeographed circulars, designed to familiarize school officials with recent developments, organization, and practice in rural schools, were prepared and distributed. These circulars are usually concerned with up-to-date articles or information of a kind which should be circulated more quickly than is possible through printed publications.

City schools.—(1) Pay status of absent teachers and pay of substitute teachers; (2) motivation of arithmetic; (3) personnel and organization of schools in the smaller cities (cities from 2,500 to 10,000 population); (4) an analysis of methods used by cities in advertising the needs of a bond issue for school buildings; (5) cur-

riculum study on "How the world rides"; (6) summary of the findings and recommendations contained in city school survey reports regarding the kindergarten.

Physical education and school hygiene.—(1) An investigation of the status of physical education and hygiene in American colleges; (2) educational and recreational features of the summer camp and its place in the general scheme of education; (3) the health of the teacher with reference to longevity, absence on account of illness, conditions affecting health, and what is now done in training schools and by departments of education to preserve and promote the welfare of present and prospective teachers; (4) the importance of the cooperation of the home in school health work.

Industrial education.—(1) A study to determine the contribution that well-organized foremanship-training programs may make toward the development of vocational industrial classes; (2) opportunities for negroes for employment in the trades and industries; (3) experimental study in mechanical aptitudes based upon the comparisons of the performances of inexperienced and experienced individuals; (4) percentage of increase during the past 10-year period in the time of the school program allotted to the manual arts work.

Commercial education.—Preliminary report on the present status of research in commercial education.

Home economics education.—Contribution of home economics to general education.

Foreign education.—(1) Education in Austria since 1918; (2) the Giovanni Gentile reform in Italy; (3) system of education in Finland; (4) ministries of education in Denmark and Sweden; (5) education in the first quarter of the twentieth century; (6) registration of dentists in Natal; (7) three institutions of higher learning in Egypt; (8) difficulties in the way of foreigners obtaining degrees in Spanish universities; (9) scholarships for the summer session of the Academy of International Law at The Hague; (10) directory of the chief educational offices of the various countries of the world; (11) list of references for students of foreign education systems and comparative education; (12) estimate of total number of persons attending educational institutions in the world and of their distribution among the elementary, secondary, and higher schools.

Statistics.—(1) State school systems; (2) teachers' colleges and normal schools; (3) city school systems; (4) public high schools; (5) universities, colleges, and professional schools; (6) manual-training and trade schools; (7) private commercial and business schools; (8) statistical survey of education for 1924; (9) illiteracy in foreign countries; (10) money value of education; (11) teacher load in elementary schools.

More than 40,000 questionnaires were sent out for statistics for 1925–26.

(B) STUDIES IN PROGRESS

The following studies, covering many phases of educational endeavor, are in progress:

Higher education.—(1) Electrical engineering curricula; (2) English in college entrance and graduation requirements; (3) modern languages in college entrance and graduation requirements; (4) chem-

istry in college entrance and graduation requirements; (5) self-help students in colleges and universities; (6) college entrance from junior and senior high schools; (7) research in education in colleges and universities; (8) expenditures of State universities and colleges, 1924–25.

Rural education.—(1) Plans for the administration of transportation in consolidated schools in selected territory; (2) relationship between school consolidation and farm ownership; (3) facilities for the administration of courses in observation and practice teaching provided by State teacher-preparing institutions in the two-year curricula for elementary rural-school teachers in the United States; (4) curricula for the preparation of rural teachers as given in State institutions in the several States, in cooperation with a representative of the research committee of the department of rural education of the National Education Association; (5) junior high schools in rural and small school communities, in cooperation with representatives of a subcommittee of the National Committee on Research in Secondary Education; (6) State laws and regulations governing the issue of teaching certificates in each of the 48 States; (7) a digest of secondary education research for the year 1925–26; (8) a questionnaire study of what supervisors have done during the year 1925–26 to discover and develop potentialities of superior teachers; (9) a study relating to the selection and evaluation of elementary-school textbooks; (10) a questionnaire study of time distribution of rural supervisors based on actual practice during a designated period of time (a continuation of the tentative study begun for the Nashville conference of supervisors held in December, 1925; (11) supervision or promotion of library service for rural schools under State direction.

Studies Nos. 8 and 10 were undertaken in cooperation with State and other rural supervisors in the Southeastern States.

City schools.—(1) Supervision in kindergarten and primary grades in cities having a population of 10,000 or more; (2) educational value of building blocks for children; (3) current practice in music for young children; (4) the education provided for young children in foreign countries; (5) housing and equipment for nursery-kindergarten-primary school children according to modern principles of education; (6) size and cost of modern school buildings, also information regarding type of buildings, classrooms, etc.; (7) research studies on the work-study-play plan, in cooperation with the national committees appointed by the United States Commissioner of Education; (8) a curriculum study based upon State parks, including lessons on the conservation of plant and animal life and outdoor recreation; (9) a nature-study curriculum based upon animal life, home life, and town life, to complete the series already begun, the first of the series being Bulletin, 1925, No. 15, "Cycles of garden life and plant life"; (10) the assembling and interpretation of curriculum material on marketing and building; (11) supervision in the larger urban high schools of the country; (12) various plans of individualized instruction; (13) teacher councils; (14) current practices in the administration of city schools; (15) school board organization.

Adult education.—(1) Best methods of teaching elementary subjects to the foreign born; (2) best text material available in Americanization work; (3) content of courses of study for institutions for training teachers of adults in elementary subjects; (4) best methods of teaching native-born American illiterates the elementary subjects; (5) State organizations for combating illiteracy; (6) methods used in locating the illiterates and securing their attendance at schools; (7) best methods of financing schools for illiterates; (8) best ways of financing night schools and securing attendance thereon; (9) opportunities provided for the education of prisoners, and methods pursued.

Industrial education.—(1) Methods for determining content material for manual arts work; (2) organization of the general shop; (3) training courses for manual arts teachers.

Commercial education.—(1) Report on research in commercial education; (2) commercial education in the junior high school.

Home economics education.—(1) An analysis of home economics objectives; (2) courses of study; (3) credit offered toward graduation; (4) preparation of teachers; (5) cost of equipment for the junior and senior high schools in the United States; (6) present child care and welfare courses offered in home economics departments in elementary, secondary, and higher educational institutions; (7) what is taught in the one-room rural school concerning right living; (8) home economics courses for boys in junior and senior high schools.

Foreign education.—(1) Study of ministries of education in the various countries; (2) statistics of world-wide illiteracy.

Physical education and school hygiene.—(1) Conditions affecting the posture of the school child and methods of improving his posture; (2) economic equipment of school playgrounds and the management of playground activities in rural schools; (3) State requirements of teachers of physical education and the time devoted to the subject and methods of teaching physical education in public schools.

Statistics.—(1) Acceleration and retardation in public schools; (2) money cost of repeating; (3) survivals through the various grades of the elementary school and the high school; (4) average time required for the American child to complete school.

2. Surveys

Surveys of educational conditions in particular institutions, localities, counties, and States constitute an important function of the Bureau of Education. Such surveys have become in recent years a most valuable method of seeking out weaknesses in school systems and educational institutions and of discovering programs of improvement. Requests for surveys have become so numerous that it has not been possible to comply with all of them.

The report of the survey of higher education in Tennessee, which was made in 1923–24, was finally completed during the past year. The findings and recommendations of this survey are summarized in the annual report of the Commissioner of Education for 1925. The complete report of this survey will be published by the Tennessee

College Association, of which Dean C. H. Gillingham, of Maryville College, Maryville, Tenn., is the secretary.

In 1925 the Bureau of Education made a school building survey in Portland, Oreg., at the request of the board of school directors of that city. A 15-year school building program, divided into three 5-year periods—1922–1927, 1927–1932, 1932–1937—was submitted. At the request of the board of school directors this building program was made out on both the traditional plan and the work-study-play or platoon plan of school organization. In 1924 the board voted to ask for a bond issue of $5,000,000 for the building program on the work-study-play plan for the first five-year period, and this bond issue was so voted by the people.

In the spring of 1926, again at the request of the board of school directors, the Bureau of Education made a recheck of the survey, in order to ascertain whether the program prepared for the second five-year period, 1927–1932, was adequate in view of possible changed conditions. It was found that with regard to the population study the survey had made underestimates in respect to only 4 of the 21 school divisions. For the city as a whole the survey had estimated that, by 1927, 1,152 classes would have to be provided for in the elementary schools, and it was found that upon the basis of actual growth since the survey was made this was the exact number of classes that would have to be provided for.

In connection with the recheck of the survey, 19 schools which had been organized on the work-study-play plan were visited, together with 22 other elementary schools and 6 high schools involved in the second five-year building program; the population study was rechecked; a comparative study made of existing building costs and the bureau estimates; and a revised building program for the second five-year period for both elementary schools and high schools was worked out, giving for each of 60 schools the estimated percentage of increase, the number of rooms needed by 1932, the capacity of each building, the number of rooms provided in old buildings and in new additions, new buildings and portables, and the cost of additions, new buildings, contents, and total cost.

In June, 1926, the board of school directors asked for a bond issue of $4,500,000 for the second five-year building program, and the people voted in favor of this second bond issue 2 to 1.

Some of the results of this survey to date are as follows: (1) Erection of eight buildings of the A type (Portland had no buildings of this type at the time of the survey); (2) elimination of 11 old, wooden-frame buildings of the type condemned by school-building experts; (3) providing children in 19 schools with modern school facilities in the way of auditoriums, gymnasiums, special activity rooms, and modern classrooms; (4) making it possible for Portland to accomplish these results with an expenditure of $9,500,000 instead of $17,639,150.

A survey of educational conditions in the State of Utah was made. Preliminary work of this survey was begun early in the fiscal year in the submission of estimates for expense, selection of people, outline of ground to be covered, etc. This project is completed to the extent that information has been collected, summarized, and interpreted. Written reports are nearing completion. Final preparation

of the combined work of members of the staff for publication is now in process.

A survey of two school systems in Fairfax County, Va.—Falls Church and Herndon—was made. This survey is a comparative study of two schools—one organized on the 8–4 basis and promoting semiannually, and one on the 7–4 basis and promoting annually—in an effort to discover the relative efficiency of the two systems. Two reports were prepared, one a complete report of 190 pages and one an abstract of 44 pages, the former for the superintendent and certain members of the board of education, the latter for other general readers. Copies are on file in the Bureau of Education, in the office of the county superintendent of Fairfax County, Va., and with each member of the board of education of Fairfax County.

A survey of Greensville County, Va., conducted in cooperation with representatives of the State department and higher institutions in the State of Virginia, was made. A report prepared by the committee is on file in the State department of education of Virginia.

A study of the advisability of transferring Campbell College from Jackson to Mount Bayou, Miss., and its articulation with the Negro Agricultural and High School of Bolivar County was made. Reports were rendered to the boards of trustees of Campbell College and of Bolivar County, Miss. No published reports are available of the results of this survey.

A State educational survey was made in Mississippi with special reference to the status of home-making education for girls and women in elementary, secondary, and higher education; also the facilities for training teachers of home economics in the Mississippi State College for Women. These findings and the recommendations made thereon are included in the published report of the Mississippi Survey Commission and may be procured by addressing the governor of that State.

A survey was undertaken of the Wilson Normal School and the Miner Normal School, of Washington, D. C. A preliminary report and recommendations have been made. The survey will be continued during the ensuing fiscal year and a final report submitted in the fall of 1926.

A brief survey was made by the specialist in adult education of the educational opportunities offered at the Oregon State Prison. The report is not yet completed, and the printing of it is undetermined at this time.

Summary of surveys during the fiscal year 1925–26

	Number
State systems of public education	2
Utah (complete study of the educational system—elementary, secondary, and higher; field work in 1925–26; report to be completed 1926–27).	
Mississippi (study of home economics in elementary, secondary, and higher education).	
Higher education	2
Tennessee (general conditions relating to higher education; field work 1923–24; report completed 1925–26).	
Wilson Normal School and Miner Normal School, Washington, D. C. (survey of teacher-training facilities; report to be completed 1926–27).	
Rural education (county and other local systems of education)	4
Campbell College, Jackson, Miss. (secondary education survey, with special reference to centralization of certain schools for the promotion of better education in agricultural pursuits).	

	Number
Rural education, etc.—Continued.	
Falls Church and Herndon (Fairfax County), Va. (elementary and secondary education survey; field work begun 1923–24; completed 1925–26).	
Arlington County, Va. (elementary and secondary education survey; field work begun 1923–24; completed 1925–26).	
Greensville County, Va. (secondary education survey).	
City schools	2
Hopewell, Va. (general public school system; field work in 1924–25; report completed 1925–26).	
Portland, Oreg. (school-building survey; recheck of survey made in 1923–24; field work 1925–26; report to be completed 1926–27).	
Total	10

3. Conferences

The following conferences were called by the Commissioner of Education:

(1) Conference of rural supervisors of the Southeastern States, held in Nashville, Tenn., December 14 and 15, 1925, which was attended by approximately 100 State and county supervisors of the States interested and by members of the technical staff of the bureau. Abstracts of the addresses at the conference were prepared as Bureau of Education Bulletin, 1926, No. 12.

(2) Luncheon conference for persons engaged in the preparation of rural teachers, held in Washington, D. C., February 23, 1926.

(3) Two conferences of the executive committee of the national committee on research in secondary education, held in the offices of the Bureau of Education, Washington, D. C.

(4) Conferences with the eight national committees on the work-study-play or platoon plan, appointed by the Commissioner of Education. Special reports were made by the music, teacher-training, and auditorium committees.

(5) Sixth annual conference on education in negro land-grant colleges, held in Washington, May 10–13, 1926. The program of this meeting was directed chiefly to the discussion of the preliminary report of the committee on college administration, with particular reference to internal questions of budget, business office practices, and general management. The study of the economic basis of the curricula in mechanic arts and industries was presented by the specialist in industrial education of the bureau as preliminary to the reorganization of the mechanic arts and industrial curricula of these institutions. Important addresses on agricultural problems and their relation to education were made by experts.

At the request of the Vocational Education Association of the Middle West and the Western Arts Association, the specialist in industrial education of the bureau organized and conducted an industrial education dinner conference on the subject of objectives for manual arts work, which was held in connection with the joint meeting of the two associations at Des Moines, Iowa, March 19, 1926. A report of this meeting is now in preparation.

Conferences were held with statistical associations, the National League of Compulsory Education officials, and with committees from the National Education Association and from the National Association of Public School Business Officials.

4. Cooperative Undertakings Other than Conferences

The bureau engaged in the following cooperative activities during the year:

(1) A member of the technical staff served as secretary of the national committee on research in secondary education, involving general advisory service, arrangement and attending of conferences, and active participation in one study, namely, that of the junior high school in rural and small school communities.

(2) Cooperation with the department of rural education including the two research undertakings previously mentioned; general advisory service in regard to research in the field of rural education in so far as it is influenced by the department of rural education; service as secretary of the executive committee of the department of rural education.

(3) Cooperation with a committee of supervisors of the Southeastern States in preparation for a conference to be held in December, 1926, including two cooperative research studies.

(4) Cooperation with the committee of 100 on rural teacher problems of the National Education Association. This includes service as secretary of the committee and chairman of a subcommittee which prepared a preliminary report concerning the preparation of teachers in county normal schools and teacher-training high schools.

(5) Organized research work on different phases of the work-study-play or platoon plan with eight national committees.

(6) A member of the staff acted as adviser of the research committee of the kindergarten-primary department of the National Education Association.

(7) A questionnaire on reading readiness was prepared and sent out on behalf of the International Kindergarten Union.

(8) Cooperation was had with the committee on urban high schools in the preparation of studies.

(9) Cooperation was given in the preparation of the programs for a number of State and National commercial teachers' meetings.

(10) Upon the invitation of the State superintendent of public instruction of Wisconsin and the secretary of the Wisconsin Conference of Social Work the chief of the city school division acted as judge on education in the Wisconsin better cities contest. Briefs submitted by the 14 cities that entered the contest were read and scored. The chief of the division, on behalf of the American Health Association, also acted as one of the judges in a contest among the high schools of the country to determine which three have the best health education programs.

(11) Cooperation was given in the preparation of the programs for a number of State and National commercial teachers' meetings.

(12) Cooperation with the American Council on Education in gathering data on the study of foreign languages. The work was completed and the material given to representatives of the council for tabulation and interpretation.

(13) Cooperative relationship has been maintained, as in the past, with college and university registrars and committees of admission and credential divisions of the State departments of education. The bureau, on request, assists any of the foregoing in evaluating the credentials of foreign students.

(14) Committees from the National Association of Public School Business Officials and from the department of superintendence of the National Education Association, cooperating with the Bureau of Education on uniform records and accounts, have been continued as the work is still incomplete.

5. Miscellaneous

The following are some of the principal miscellaneous activities of the bureau during the fiscal year:

(1) The preparation and distribution of material for education week, November 16–22, 1925. Three new publications were prepared for the occasion, namely, (*a*) "How, Why, and When to Prepare for American Education Week," a pamphlet of 30 pages; (*b*) broadside, containing appropriate information, statistics, and quotations; and (*c*) School Life, of which the October number consisted largely of suggestive material for education week.

(2) Display of educational charts, models, and pictures at the departmental exhibit held during the meeting of the department of superintendence of the National Education Association, Washington, February, 1926. The exhibit, in its entirety, was designed to show the Interior Department as a "Federal university for the people," and was displayed in the Interior Department Building. Three documents were prepared for the occasion for distribution, namely, (*a*) A Federal University for the People, a pamphlet of 36 pages setting forth the educational functions of the Department of the Interior; (*b*) an eight-page leaflet with a similar title comprising the program of activities of the week; and (*c*) Service Rendered by the United States Bureau of Education to Rural Education, a folder of 6 pages.

In connection with the foregoing the bureau made an exhibit of plans of school buildings of a nation-wide character, showing types of buildings now being erected for both elementary and high schools and the cost of the same. Information was received from 127 cities and 63 counties in 32 States. Framed designs of 67 city schools and 21 rural schools were displayed. They included photographs of the exterior of each building, floor plans of each floor, and the statistical data relating to the same. These designs are now on permanent exhibition in the bureau for the use of school superintendents, boards of education, and laymen. A bulletin on the results of this school-building exhibit is being prepared.

(3) Educational exhibit at the sesquicentennial at Philadelphia, Pa. Among some of the features are charts illustrating the general growth of education in the United States during the past 50 years; a mechanical model showing what per cent of the children entering the first five elementary grades reach the subsequent grades and enter and graduate from high school and college; a moving-picture exhibit of 55 pictures illustrating the reading activities of groups of women in Glendale and Berkeley, Calif., and the District of Columbia; project in children's home reading in the District of Columbia; an exposition of home-economics methods, etc. The Alaska division of the bureau also contributed a most interesting exhibit of the educational and industrial progress of the natives of Alaska.

(4) Numerous articles on educational subjects were prepared by members of the staff for educational journals and other magazines.

(5) The specialist in commercial education, as president of the department of business education of the National Education Association, arranged the program and conducted the meetings of the department which were held in Philadelphia, Pa.

(6) A large amount of translating from foreign languages of letters and documents was made for the various bureaus of the Department of the Interior as well as for the bureau proper.

(7) Radio messages were prepared for the American Child Health Association and other educational organizations.

(8) Assistance in planning schools was extended to locations in Alaska and a number of cities and districts in Alabama, Florida, Kentucky, Mississippi, Oklahoma, Pennsylvania, and Tennessee.

(9) Preparation of an informational and exploratory course for boys and girls contemplating business pursuits and to assist parents in the guidance of their children.

(10) Preparation of a more technical reading course in commercial education for the teachers of commercial subjects.

B. HOME EDUCATION

During the year more than 1,600 new readers were enrolled in the home reading courses of the bureau, which brings the total number enrolled to more than 20,000. Certificates to the number of 155 were issued to readers who completed courses, bringing the total number issued to about 1,000. A study of all the bureau's reading courses as to length and requirements was made, and the courses were modified and revised in accordance with the evident needs.

As heretofore the bureau has secured the advice and opinion of specialists in the subjects selected for its reading courses, believing that the lists should bear the approval of those who speak with authority on these subjects. More than 20 specialists have made free contributions to this work. During the past year the dean of education of the University of Chicago, a specialist in children's reading of Columbia University, and the children's librarian's section of the American Library Association have cooperated in this way. For several years extension directors or other representatives of State universities, State colleges, and State library commissions have cooperated with the bureau in conducting the reading courses.

The campaign to send children to the first grade of school free from remediable defects was carried on jointly by the Bureau of Education and the National Congress of Parents and Teachers. For this campaign publicity articles, circulars, and a poster were prepared and issued. More than 13,000 school superintendents and other educators were urged by the bureau to lend their aid and encouragement. The response to this was immediate and favorable.

At the first meeting of the National Committee on Home Education at the Bureau of Education, which was inaugurated by the United States Commissioner of Education and attended by representatives of the National University Extension Association, the American Library Association, and the National Congress of Parents and Teachers, the question of ways and means of promoting home education was discussed. It was the consensus of opinion that State groups should be formed to study the needs of adult home education.

In all, more than 6,000 press notices on home-education matters were sent out; 19,678 copies of circular letters and 15,000 posters were distributed. A special mailing list of leaders in parent-teacher associations was prepared for the Government Printing Office.

C. ALASKA

The Alaska division of the Bureau of Education has charge of the education of the natives of Alaska, extends to them all possible medical relief, fosters native commercial enterprises, and relieves cases of destitution among natives. The work in Alaska is under the immediate supervision of the chief of the Alaska division, with headquarters in Seattle, Wash. The Seattle office functions as a purchasing and disbursing agent for all the bureau's activities in Alaska. It selects teachers and other personnel to recommend to the Commissioner of Education for appointment; it expends or invests, under the direction of the interested parties, funds sent to it by employees in Alaska, by the cooperative stores of the natives, or by individual natives of Alaska; it also sells commodities, such as furs, ivory, and fish, for the natives, and remits, deposits, or expends the proceeds as directed.

Education.—When the Alaska school service was established 40 years ago the aborigines of Alaska were in absolutely primitive condition, and their effect upon the industrial and economic situation in Alaska was negligible. In southern Alaska and in the interior the natives lived in small, filthy hovels with little light and no ventilation. Along the shores of Bering Sea and the Arctic Ocean their winter habitations were semisubterranean huts; when the warmer days of summer thawed the frozen soil, rendering these underground hovels uninhabitable, their shelters were skin-covered tents along the coast and the rivers. The Eskimos still used rude implements of stone, ivory, and bone, and consumed much of their seal and walrus meat raw. Lamps filled with whale or seal oil, and with dried moss as a wick, were still used for heating and cooking purposes.

With the steady advance through the years of the Bureau of Education's school system and other civilizing agencies these primitive conditions have gradually disappeared, except in some of the remotest settlements which the bureau has not as yet been able to reach. In many of the villages, as the result of education, the old huts have been replaced by neat, well-furnished houses, the homes of self-supporting, self-respecting natives, thousands of whom are employed by the great salmon canneries of southern Alaska. The fleets of power boats belonging to and operated by the natives are of great service in transporting fish from the fishing grounds to the canneries. Many natives are employed in the mines. Others are pilots, trappers, storekeepers, loggers, or ivory carvers. For many years the Bureau of Education has appointed as teachers in its Alaska school service the brightest of the graduates of its schools. Girls showing special qualifications for medical service are received into the bureau's hospital at Juneau for training as nurses. Natives are employed as cooks, janitors, and orderlies in the hospitals. Natives are also represented in the legal and clerical professions. Throughout northwestern Alaska, and along the Alaska Railroad, native owners of reindeer, whose herds furnish an inexhaustible meat supply, are most important factors in the industrial and economic situation.

The results of the bureau's work are especially apparent in the isolated settlements of the far north.

Formerly no systematic form of industrial education for Alaskan natives was provided within the Territory. In order to receive such training, for many years young Alaskans were sent to schools maintained by the Bureau of Indian Affairs in the States. This policy was unwise and uneconomic. The change of climate frequently had a deleterious effect upon the health of the children. Some remained in the States. Many who returned to Alaska found it difficult to adapt themselves to their home environment. To meet the situation the policy has been adopted of establishing industrial schools within Alaska itself. Industrial schools have already been organized at Eklutna, near Anchorage, on the Alaska Railroad; at Kanakanak, on Bristol Bay; and at White Mountan, on Seward Peninsula, all of which are strategic points. Included in the curriculum are such industries as house building, carpentry, boat building, the making of furniture, sled construction, the operation and repair of gas engines, marine engineering, navigation, tanning of skins, the carving of ivory, and basket weaving. It is proposed to extend to other sections of Alaska facilities for industrial training as rapidly as funds will permit.

The educational statistics for the school year ending June 30, 1926, are as follows:

Total number of days in actual attendance	359,085.43
Total number of pupils enrolled during the year	3,582
Average daily attendance throughout the year	2,491.37
Percentage of attendance	73.56
Average number in schoolroom each day	29.85
Number of schools open 180 days per year or more	4
Number of schools open 160 days per year or more, but less than 180	25
Number of schools open 140 days per year or more, but less than 160	31
Number of schools open 120 days per year or more, but less than 140	16
Number of schools open 100 days per year or more, but less than 120	5
Number of schools open less than 80 days	3
Total schoolrooms opened	126
Average number of days in school year	144.06
During the year there was spent for repairs on school buildings and not counted as a part of the operation of the school	$9,208.40
Spent for new buildings	$40,056.56

School attendance by district

District	Total enrollment	Average daily attendance	Average number of days in school year	Total days attendance	Per cent attendance
Central	392	255.84	151.28	31,936.93	63.12
Northwestern	553	397.9	129	52,112	80.84
Seward Peninsula	594	451.48	151	64,043	73.82
Southeastern	1,160	764.22	158.7	123,577	65.45
Southwestern	352	285.69	129.6	38,382.5	84.32
Western	531	336.24	144.8	49,034	73.8
Total	3,582	2,491.37	144.6	359,085.43	73.56

Each teacher not only teaches his own school, but is a dispensing agent of the medical chest, a teacher of sanitation and health, and a village sanitary engineer. From the summaries made from the reports submitted by the schoolroom teachers in the Alaska service the past year, the following welfare services were rendered:

The community service

District	Visits made to homes	Medical assistance rendered	Number of births reported	Number of deaths reported	Native population served	Number of teachers
Central	3,251	2,962	46	40	1,544	23
Northwestern	1,980	2,089	35	14	2,124	22
Seward Peninsula	2,860	4,195	51	30	2,068	26
Southeastern	2,758	2,564	75	44	4,358	35
Southwestern	1,725	1,925	41	17	1,068	23
Western	2,645	5,637	49	32	2,020	30
Total	15,219	19,372	297	177	13,192	159

Medical relief.—The medical work for the natives of Alaska has fallen short of what has been accomplished along educational lines. It has never been possible to secure appropriations to relieve natives suffering from tuberculosis. It is not practicable to handle these patients in the regular hospitals, and a sanitarium located in Alaska and designed for the care and treatment of tubercular natives only of Alaska should be the next step in the extension of the medical service.

The efforts of the Alaska division to bring medical relief to the 4,000 and more native people living along the Yukon and tributary rivers in the interior of Alaska have met with success. Money was made available on the 10th day of May, 1926, for the remodeling, equipping, and manning of a boat to be used as a floating hospital on the Yukon River during the season of navigation. In addition to rendering medical assistance and giving instruction in personal hygiene, the medical staff, consisting of a doctor and two nurses, are making and will submit for consideration at the end of the cruise a sanitary survey of the entire region.

Plans are under consideration for the repairing and remodeling of certain of the buildings in the Fort Gibbon Military Reservation at Tanana, now abandoned, which have been transferred to this bureau, with a view of extending our medical service by opening another hospital in the near future at this point on the Yukon.

During the year ending June 30, 1926, 5 full-time physicians, 3 part-time physicians, 22 hospital and village nurses, and 1 first-aid man were employed by the Bureau of Education to minister to the needs of the natives in Alaska. Five hospitals were maintained in Alaska, and the contractual relations with other hospitals in Alaska and in Washington and Oregon were continued. A number of deformed children were brought to Seattle and treated successfully in the Orthopedic Hospital and returned to their homes in Alaska. Some idea of the medical services rendered during the past year will be glimpsed from the following statistics:

Summary of reports made by nurses, teachers of sanitation, and doctors

	Nurses and teachers of sanitation	Doctors	Total
Number of visits to homes	12,033	401	12,434
Number of patients treated	8,311	2,836	11,147
Number of treatments given	22,026	12,820	34,846
Number of births reported	117	60	177
Number of deaths reported	72	41	113
Total days of hospital care		6,989	6,989
Out and clinic patients		3,109	3,109
Out and clinic calls		1,651	1,651
Total cost of medical service		$119,910.56	

Classification of diseases

	Cases treated by nurses	Cases treated by doctors	Total
Abscesses, ulcers, and boils	262	170	432
Appendicitis	8	95	103
Asthma	13	12	25
Breast—carcinoma, etc	12	5	17
Burns and frostbites	174	24	198
Gonorrhea	18	99	117
Heart trouble	17	19	36
Hernia	1	4	5
Infections	89	88	177
Influenza, pneumonia, grippe	1,944	308	2,252
Kidney disorders	23	13	36
Malnutrition	46	25	71
Meningitis	1	3	4
Nervous system—mental	25	85	110
New born	33	23	56
Pelvic disorders	24	7	31
Pregnancy, confinement	82	88	170
Rheumatism, neuralgia	343	234	577
Stomach and bowels	669	248	917
Surgical operations and dressings	257	163	420
Syphilis	8	48	56
Throat, tonsils, etc	443	309	752
Trachoma	7	38	45
Tuberculosis	303	682	985
Miscellaneous [1]	2,454	2,666	5,120
Violence—accidents	480	105	585
Total	7,736	5,561	13,297

[1] Many minor ailments; some uncommon and serious.

Reindeer industry.—The reindeer industry is no longer an experiment, although still in its infancy. It is estimated that there are 400,000 square miles of barren tundra in Alaska where no horse, cow, sheep, or goat can find pasture; but everywhere on this vast expanse of frozen land the reindeer can find the long, fibrous, white moss which is his food. It is further estimated that there is plenty of food for 10,000,000 of these hardy animals. The time has already come when Alaska has great reindeer ranches similar to the cattle ranches of the Southwest. The natives in many places are depending on their reindeer for clothing and food, and are now successfully marketing the surplus meat and hides in the States.

U. S. S. "Boxer".—In April, 1920, the U. S. S. *Boxer*, a wooden vessel formerly used by the Government as a training ship for naval cadets, was transferred to the Department of the Interior for the use of the Alaska division in connection with its work in the Territory. This boat was remodeled and equipped with modern machinery at an approximate cost of $100,000 and now carries annually to the coast stations and to the distributing points at the mouths of the larger rivers of Alaska teachers, doctors, and nurses, together with a heavy tonnage of supplies and equipment, voyaging as far north as Point Barrow. On its return trip it brings back a cargo of reindeer meat, which is sold for the benefit of the native owners.

D. LIBRARY

During the year the library of the bureau gave particular attention to the development of its bibliographical and reference service, while its other activities continued to function at their normal rate. A large number of new bibliographies were compiled and many others were revised and brought up to date for mimeographing and

typewriting. A list of references on vocational guidance was printed as Library Leaflet No. 32, October, 1925. Numerous requests for these bibliographies, coming both by mail and directly from visitors to the office, were filled. Answers were also prepared and mailed to many correspondents who wrote seeking information on various educational topics. A considerable number of volumes were lent outside the office, a part of which were sent by mail to libraries and persons away from Washington. A record of current educational publications, giving a select list of the educational literature received during the year ending April 1, 1926, was prepared for the printer to be published as a bulletin of the bureau.

The library completely revised the manuscript of Statistics of Public, Society, and School Libraries, 1923, which was then sent to the printer for publication as a bulletin. A chart showing "Ten year's growth in book service," from 1913 to 1923, based on these statistics, was prepared and used as a feature in the bureau's educational exhibit in the Interior Department building during the meeting of the department of superintendence in Washington in February, 1926. The library also compiled for publication a descriptive list of educational associations, boards, and foundations from information obtained by a questionnaire through the mails.

The current publications in the library continued to increase by additions from purchase, gift, and copyright transfer. A large section of the older material not adapted to the use of this bureau, however, which had been left in the Pension Building since the removal of the bureau from that location, was eliminated during the winter by transfer to the Library of Congress and to other libraries, and to the General Supply Committee. The remainder of the books left at the Pension Office Building were then transferred to the Interior Department Building, where they are being incorporated with the books belonging to this library, which are already in the latter building.

Cooperation with the Library of Congress in the production of printed catalogue cards for educational titles was continued, and the general work of cataloguing the library also made progress.

At the close of the year arrangements were made to acquire a quantity of new steel shelving for the library, and plans were carried out to install the personnel and equipment in the new quarters assigned on the sixth floor of the Interior Building adjacent to the other divisions of the bureau.

E. PUBLICATIONS

The Biennial Survey of Education, which superseded the voluminous annual report, is the most comprehensive and extensive of the publications of the Bureau of Education. As it has developed in the past 10 years it comprises two volumes—the first presenting the educational progress of the biennium in a series of descriptive papers, the second setting forth in statistical tables the status of each type of educational institutions in the United States. The several chapters of the Biennial Survey are issued in pamphlet form as they are completed, but all are published later in a single bound volume.

Documents of this class were the dominating feature of the publications of 1925–26 and consumed $12,786.51, considerably more than a

fourth of the printing allotment for the year. They included the bound volume of the statistics of 1921–22, 5 statistical chapters of 1922–1924, and 17 chapters of verbal discussions of educational progress.

Following the Biennial Survey in the outstanding publications of the year is the decennial report of land-grant college education, which was completed during the year. It was issued in five bulletins, devoted, respectively, to (1) history and educational objectives; (2) the liberal arts and sciences, with miscellaneous activities; (3) agriculture; (4) engineering and mechanic arts; and (5) home economics. Each phase of every subject is treated by a different author, and 63 papers, each by a recognized authority, comprise the entire series.

Bulletins addressed directly to classroom teachers, prepared under the direction of the city schools division, were represented in the publications of 1925–26 by two documents, namely, Motivation of Arithmetic (Bulletin, 1925, No. 43) by G. M. Wilson, and Cycles of Garden and Plant Life (Bulletin, 1925, No. 15) by Florence C. Fox. Another document of similar type, How the World Rides, is now ready for distribution.

"Health publications" of the bureau have long been in great demand, and the issue in 1925–26 maintained the usual standard of popularity. Health and Physique of School Children (Bulletin, 1925, No. 21) by James F. Rogers, M. D., chief of the bureau's health division, and Progress and Prospect in School Health Work (School Health Studies No. 10), a statistical study, have been extensively distributed, principally by sale through the Superintendent of Documents.

Two statistical bulletins of unusual character appear in the list of unfinished documents, namely, Statistics of Public, Society, and School Libraries (Bulletin, 1926, No. 9) and Residence and Migration of University and College Students. Both documents have been in preparation for several years, and each will supply a distinct need. Accredited Higher Institutions (Bulletin, 1926, No. 10) was not delivered by the printer before the end of the year 1925–26, but it is now available. Setting forth the lists and standards of the several accrediting agencies after the manner of similar publications of the past, it is a document of distinct usefulness.

Publications of the year relating to rural education were in the main leaflets of limited scope. Recent Data on Consolidation of Schools and Transportation of Pupils (Bulletin, 1925, No. 22) and Salaries of Rural Teachers and Length of School Term (Rural School Leaflet No. 39) were the most extensive of them.

A publication of the bureau which is of great practical usefulness is the Educational Directory. It is published annually—in the past year as Bulletin, 1926, No. 1. The style of the latest issue was materially changed in order to make the lists in it less extensive and easier of access.

It is expected that the relation between the Bureau of Education and the national committee on research in secondary education will result in the publication of a number of well-considered reports in the field of that committee's activities. The first of the series was Bibliography of Secondary Education Research 1920–1925

(Bulletin, 1926, No. 2), which was prepared by members of the bureau's staff but in pursuance of the committee's plans.

In commemoration of the one hundred and fiftieth anniversary of the adoption of the Declaration of Independence the Bureau of Education issued a pamphlet of 20 pages entitled "The Story of the Declaration of Independence," which contained the declaration in full, a brief summary of the historical events preceding and resulting in its creation, and short biographical sketches of six of the prominent signers. This was done in obedience to an act of Congress approved May 28, 1926, which was proposed and advocated by Hon. O. J. Kvale, Member of Congress from Minnesota. The pamphlet was issued in a large edition with the intention of supplying a copy to every school in the United States.

A monthly periodical, School Life, is an essential factor in the bureau's scheme for the dissemination of educational information.

The usefulness of such a medium is recognized generally by educational administrators, and many State departments of education, city school systems, universities, normal schools, and State and National associations of teachers issue periodical bulletins or magazines of some sort.

School Life is not adressed to specialists of any type, but to all who are concerned with the work of education. Its articles are intended to be useful to every teacher of every degree.

In accordance with the law which governs such periodicals only 2,000 copies may be printed for free distribution. These are sent to libraries which make application for them. Additional copies are printed for supplying persons in the educational work of the United States Government and for exchanges and the like, but the principal distribution is by subscription through the Superintendent of Documents. The price, 50 cents a year, is fixed to cover only the actual cost of printing and distribution.

Items of educational news are supplied to the daily and weekly press and to educational periodicals in the form of a "Clip Sheet," which is issued on the 15th of each month. The items are obtained from a great variety of sources, and they are expressed in the newspaper style.

Publications issued July 1, 1925, to June, 30, 1926

BULLETIN, 1924

No. 14. Biennial survey of education, 1920–1922. (Statistics.)

BULLETINS, 1925

No. 11. Accredited secondary schools in the United States.

No. 12. Statistics of State universities and State colleges for the year ending June 30, 1924.

No. 13. Bibliography of science teaching in secondary schools. Earl R. Glenn and Josephine Walker.

No. 15. Cycles of garden life and plant life. Florence C. Fox.

No. 16. Work of the Bureau of Education for the natives of Alaska. William Hamilton. Advance sheets from Biennial Survey, 1922–1924.

No. 17. Professional staff of State departments of education. A. W. Ferguson.

No. 18. Progress in kindergarten education. Nina C. Vandewalker. Advance sheets from the Biennial Survey, 1922–1924.

No. 19. Statistics of land-grant colleges, 1923. W. J. Greenleaf.

No. 20. Statistics of kindergartens. Advance sheets from the Biennial Survey, 1922–1924.
No. 21. Health and physique of school children. J. F. Rogers. Advance sheets from the Biennial Survey, 1922–1924.
No. 22. Recent data on consolidation of schools and transportation of pupils. J. F. Abel.
No. 23. Statistics of private high schools and academies, 1923–1924.
No. 24. Status of high-school principal. D. H. Eikenberry.
No. 25. Constructive tendencies in rural education. Katherine M. Cook. Advance sheets from Biennial Survey, 1922–1924.
No. 26. Statistics of land-grant colleges, 1924. W. J. Greenleaf.
No. 27. Some recent movements in city school systems. W. S. Deffenbaugh. Advance sheets from Biennial Survey, 1922–1924.
No. 28. Statistics of teachers colleges and normal schools. Advance sheets from Biennial Survey, 1922–1924.
No. 29. Land-grant college education, 1910–1920. Pt. V, Home Economics.
No. 30. Parent-teacher associations at work. Ellen C. Lombard. Advance sheets from Biennial Survey, 1922–1924.
No. 31. Medical education. N. P. Colwell. Advance sheets from Biennial Survey, 1922–1924.
No. 32. Agricultural education. G. A. Works. Advance sheets from Biennial Survey, 1922–1924.
No. 33. Education pays the State. M. A. Foster.
No. 34. Educational boards and foundations. H. R. Evans. Advance sheets from Biennial Survey, 1922–1924.
No. 35. Review of educational legislation, 1923 and 1924. W. R. Hood. Advance sheets from Biennial Survey, 1922–1924.
No. 36. Adult education for foreign-born and native illiterates. C. M. Herlihy. Advance sheets from Biennial Survey, 1922–1924.
No. 37. Industrial education. M. M. Proffitt. Advance sheets from Biennial Survey, 1922–1924.
No. 38. Art education in the United States. R. B. Farnum. Advance sheets from Biennial Survey, 1922–1924.
No. 39. Progress of dental education. F. C. Waite. Advance sheets from Biennial Survey, 1922–1924.
No. 40. Statistics of public high schools, 1923–24. Advance sheets from Biennial Survey, 1922–1924.
No. 42. Statistics of State school systems, 1923–24. Advance sheets from Biennial Survey, 1922–1924.
No. 43. Motivation of arithmetic. G. M. Wilson.
No. 45. Statistics of universities, colleges, and professional schools, 1923–24. Advance sheets from Biennial Survey, 1922–1924.

BULLETINS, 1926

No. 1. Educational directory, 1926.
No. 2. Bibiliography of secondary education research, 1920–1925. E. E. Windes and W. J. Greenleaf.
No. 3. Recent progress in legal education. A. Z. Reed. Advance sheets from Biennial Survey, 1922–1924.
No. 4. Progress in home economics education. E. S. Whitcomb. Advance sheets from Biennial Survey, 1922–1924.
No. 5. General university extension. T. H. Shelby. Advance sheets from Biennial Survey, 1922–1924.

FOREIGN EDUCATION LEAFLET

No. 1. Education in the Irish Free State.

HEALTH EDUCATION PUBLICATIONS

Miscellaneous

Price list—Health Education Publications, November, 1924. (Reprint.)
Price list—Health Education Publications, January, 1926.
Interest-arousing devices for health teaching. (Reprint.)

PHYSICAL EDUCATION SERIES

No. 6. The school as the people's clubhouse. Harold O. Berg.

SCHOOL HEALTH STUDIES

No. 9. Training of dental hygienists. J. F. Rogers.
No. 10. Progress and prospect in school health work. J. F. Rogers.
No. 11. School nurse administration. J. F. Rogers.

HIGHER EDUCATION CIRCULARS

No. 30. Policies and curricula of schools of education in State universities. J. B. Edmonson and A. H. Webster.
No. 31. Rhodes scholarships, 1926.

HOME ECONOMICS CIRCULAR

No. 20. Home economics instruction in certain higher institutions. Emeline S. Whitcomb.

INDUSTRIAL EDUCATION CIRCULAR

No. 24. Dr. John De La Howe Industrial School, Willington, S. C.

LIBRARY LEAFLET (LISTS OF REFERENCES)

No. 32. October, 1925. Vocational guidance.

READING COURSES

No. 4. Reading course for boys. (Reprint.)
No. 5. Reading course for girls. (Reprint.)
No. 6. Thirty books of fiction. (Reprint.)
No. 7. Thirty world heroes. (Reprint.)
No. 9. Thirty American heroes. (Reprint.)
No. 10. American history. (Reprint.)
No. 11. France and her history. (Reprint.)
No. 18. Dante. (Reprint.)
No. 19. Master builders of to-day. (Reprint.)
No. 20. Teaching. (Reprint.)
No. 21. Twenty good books for parents. (Reprint.)
No. 22. Agriculture and country life. (Reprint.)
No. 23. How to know architecture. R. F. Bach. (Reprint.)
No. 26. Sixty selected stories for boys and girls. Florence C. Fox. (Reprint.)
No. 28. Kindergarten ideals in the home and school. A reading course for parents. Nina C. Vandewalker. (Reprint.)
No. 29. The pre-school child. (Reprint.)

RURAL SCHOOL LEAFLETS

No. 11. Objectives in elementary rural-school agriculture. E. E. Windes. (Reprint.)
No. 39. Salaries of rural teachers and length of school term. Alex Summers.
No. 40. A rural curriculum: An outstanding need in rural schools. Fannie W. Dunn.

REPORT

Report of the Commissioner of Education for the year ended June 30, 1925.

STATISTICAL CIRCULAR

No. 5. Organization, housing, and staffing of State departments of education. H. M. Carle.

MISCELLANEOUS

1925. Faith of the American people in public education. Jno. J. Tigert.
1926. Publications of the United States Bureau of Education of special interest to high-school teachers.
1926. Service rendered by the United States Bureau of Education to rural education.
1926. A Federal university for the people.
1926. The story of the Declaration of Independence. J. C. Boykin.
Program—American Education Week.
Broadside—American Education Week.
How, why, and when to prepare for American Education Week.
Publications available, September, 1925.
Publications available, March, 1926.

CLIP SHEET

July, 1925, to June, 1926 (monthly; 12 numbers).

PERIODICAL

School Life, vol. 11, Nos. 1–10, September, 1925, to June, 1926, inclusive (10 numbers).
School Life, index and title-page, vol. 10, September, 1924, to June, 1925.

(Unfinished printing—June 30, 1926)

BULLETIN, 1925

No. 41. Statistics of city school systems, 1923–24. Advance sheets from Biennial Survey, 1922–1924.

BULLETINS, 1926

No. 6. Personnel and organization of schools in the small cities. Harry S. Ganders.
No. 7. Character education. Report of the committee on character education of the National Education Association.
No. 8. How the world rides. Florence C. Fox.
No. 9. Statistics of public, society, and school libraries, 1923.
No. 10. Accredited higher institutions. Ella B. Ratcliffe.
No. 11. Residence and migration of university and college students. George F. Zook.

CITY SCHOOL LEAFLET

No. 21. Pay status of absent teachers and pay of substitute teachers.

HEALTH EDUCATION PUBLICATION

No. 19. Is your child ready for school? James F. Rogers.

RURAL SCHOOL LEAFLET

No. 41. Characteristic features of recent superior State courses of study. Annie Reynolds.

F. ACTIVITIES OF THE COMMISSIONER

During the year the commissioner traveled 36,624 miles; spent 105 days in the field, including Sundays; addressed 2 national conferences called by the Bureau of Education, 9 national associations, and 18 State associations; visited officially 2 State departments of education; addressed several city and county educational associations; delivered 8 addresses before institutions of higher learning and 7 addresses at summer schools; made 9 addresses at commencement exercises, 2 dedicatory addresses, and spoke at the semicentennial exercises at Vanderbilt University; addressed 4 high schools and 1 lyceum; broadcasted 2 addresses; spoke before 8 business organizations (Kiwanis, Rotary, and other clubs); and made a number of addresses before miscellaneous organizations. Altogether he made a total of 115 addresses before audiences aggregating 116,346. (See fig. 1.)

The commissioner attended meetings and discharged duties as vice chairman of the Federal Board for Vocational Education, as a member of the Federal Board for Maternity and Infant Hygiene, as chairman of the Federal Council of Citizenship Training, as member of the Interdepartmental Committee on Overseas Possessions, and as chairman of the Highway Education Board. He created a national "Committee on Materials of Instruction," of which he was elected chairman, and attended meetings of this committee, as well as of the National Commission on Economy and Efficiency in the Business Administration of Public School Systems, of which he is a member. The commissioner personally directed the state-wide

educational survey of Utah undertaken by the bureau. He wrote 21 articles and held approximately 450 conferences in his office in Washington with those seeking advice and assistance in educational matters.

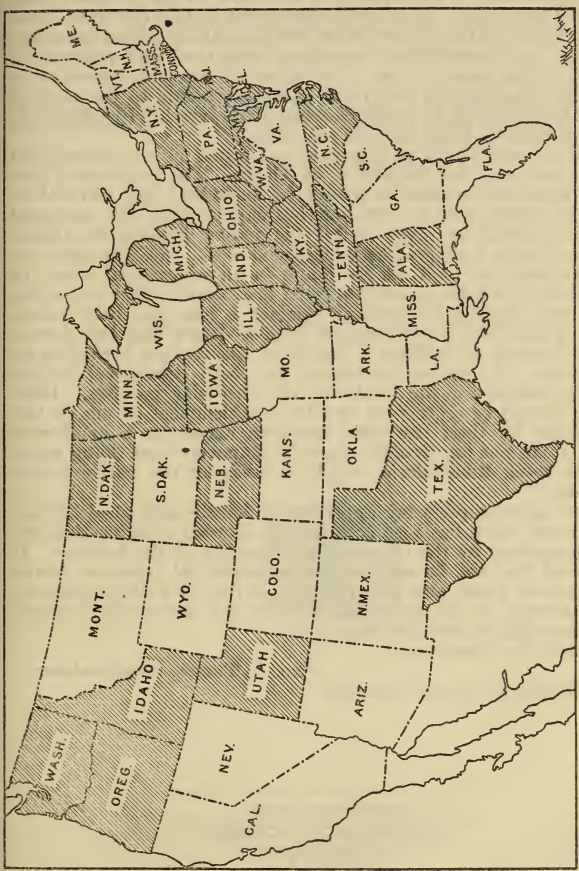


FIG. 1.—Map showing the States in which the Commissioner of Education personally has made educational addresses, visited schools, conferred with educational officials, or performed some other kind of field service during the fiscal year 1925–26. During the year the commissioner traveled 36,624 miles

G. RECOMMENDATIONS

With the removal of the library and statistical division to the sixth floor of the Interior Building, this bureau is now ideally

quartered. As a result of placing the entire staff in contiguous rooms, morale and efficiency of organization are greatly enhanced. In previous reports the need for enlarging the Bureau of Education so as to make it more adequate for research and investigation has been emphasized. The demand for increased service in these directions still continues. The most urgent need in this direction seems to be in fields related to curriculum reorganization, school financing, buildings and construction, secondary education, and research in general. Experience in the correlation of research activities in the fields of secondary and rural education points to the need of the establishment of a central clearing house which will adequately correlate research in all fields of education.

There is need for a still greater expansion of the educational and medical work for the natives of Alaska. The program of providing industrial education should be extended. We have three industrial schools now in operation, but opportunities for vocational education should be given to all the native peoples of Alaska. This seems to be their greatest educational need. Medical assistance falls far short of what we are doing in an educational way. In many parts of Alaska no medical relief is available either for whites or natives. During the present summer a boat has been placed on the Yukon and its tributaries, with a doctor and two nurses, for the purpose of making a survey of the regions bordering on these rivers. As yet no sanitarium has been established in any point in Alaska for the treatment of tubercular patients. These patients should be segregated and the establishment of one or two sanitariums for their treatment has been urged for a number of years. I can not too strongly urge the importance of doing something to check tuberculosis, which is ravaging the native people of Alaska.

Let me again express my appreciation for the continued interest and support which has been accorded the Bureau of Education and its commissioner by the office of the Secretary of the Interior. It is believed that the bureau has made substantial progress during the past few years, and this progress is due in a large measure, if not entirely, to the unflagging interest and unwavering support of the Secretary of the Interior.

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1927

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1927

THE BUREAU OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIAM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D., LL. D.
July 1, 1906, to June 30, 1911

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to date

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REPORT OF THE COMMISSIONER OF EDUCATION

Department of the Interior,
Bureau of Education,
Washington, D. C., September 1, 1927.

Sir: I have the honor to submit the following report of recent events in public education of the United States, and summary of the operations of the Bureau of Education for the fiscal year ended June 30, 1927, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

Preliminary Statement

A review of important movements in the field of public education from year to year has become valuable to those interested in the promotion of education in the several States and communities. The Bureau of Education, with the data and information which it gathers in all fields of education, is the only agency which is able to make such a statement. The interpretation of statistics and other types of information collected on a national scale for the use of school authorities is one of the most important services which this office renders. Fortunately we are able each year to make this information more complete, accurate, and recent, and therefore more helpful to those administering schools and to students of educational progress. We have arrived at the point where it appears probable that we can make data collected in one year available in the following year. Unless all signs fail, this will be accomplished in the next fiscal year. It was true, in a large measure, of the fiscal year just closed.

The functions and organization of the Bureau of Education have been discussed in past annual reports. As these have continued without change during the year no statement with reference to them need be repeated in this report. In this report, the policy adopted in my last report of presenting the work of the bureau in topical outline rather than in details of divisional activities will be followed.

Summarizing all types of field service during the fiscal year, 21 members of the technical staff of the bureau, exclusive of the com-

missioner, rendered an aggregate of 670 days in the field outside of the District of Columbia in 41 different States and the Territory of Hawaii. Sixteen members of the staff, exclusive of the commissioner, delivered 169 addresses in 30 different States, the District of Columbia, and Hawaii, to audiences aggregating 46,356 persons.

I. Review of Recent Events in Public Education

STATISTICS OF EDUCATION

During the fiscal year data were collected from the States and from the outlying parts of the United States concerning public and private elementary and secondary schools. The principal items included are the number of teachers, enrollments, average daily attendance, length of school year, receipts, expenditures, and value of school property. Similar data were collected from 2,900 city school systems, from 18,703 out of approximately 22,500 public high schools, from 2,350 out of 2,500 private high schools, from 402 teachers' colleges and normal schools, and from 974 colleges and universities.

Compilation of the statistics for all classes of institutions has not been completed at this date. Reports from State departments of education show that for 1925 the enrollments in public elementary and secondary schools of the various States include 24,650,291 pupils, of which number 3,650,903 were in public high schools above the regular elementary grades. The average daily attendance in these schools for the year was 19,838,384; total receipts amounted to $2,024,757,377, expenditures to $1,946,096,912, and the total value of all property used for public-school purposes to $4,252,328,900.

The expenditure per pupil in average daily attendance was $98.10 for the year. While expenditures for public schools are still on the increase, the rate of increase is gradually falling off. Growth in high-school enrollment continues at a high rate and junior high schools are being organized rapidly.

Salaries of public-school teachers are still on the increase. The average annual salary for teachers, principals, and supervisors in 1910 was $485; in 1915 it was $543; in 1920, $871; in 1922, $1,166; in 1924, $1,227; and in 1925 it was $1,252. The increase from 1915 to 1920 amounts to 60 per cent, and from 1920 to 1925 to 44 per cent. The increase from 1920 to 1922 is about $148 annually, from 1922 to 1924 about $30 annually, and from 1924 to 1925 it is $25 for the year. This slowing up in the rate of increase would indicate that the peak in teachers' salaries is not far distant.

The total amount expended for public elementary and secondary schools in 1924 is 37.8 per cent of the volume of State and local tax-

ation, 22.6 per cent of the whole tax burden, and 2.87 per cent of the total income of the people of the United States for that year. There is a tendency in many places to reduce school taxes, and consequently school support.

The total enrollment in 402 teachers' colleges and normal schools in 1926 was 294,064, of which number 270,206, or 92 per cent, were enrolled in teacher-training courses. In all types of institutions having teacher-training work, 304,412 were enrolled in such courses in regular sessions, and 494,943 is the total if summer-school students are included and duplicates excluded. If the regular students enrolled in teacher training complete the work in the usual time required in the schools in which they are enrolled, they can replace one-seventh of the present teaching force in all schools in the United States annually.

One hundred and one teachers' colleges have now been organized. In 1926 about 62 per cent of the teacher-training students in teachers' colleges and normal schools were enrolled in teachers' colleges. Teacher-training work is being taken over rather steadily by public institutions, and, with the exception of the past six years, a gradually decreasing proportion of men have been preparing for the teaching profession.

Reports were received from 739 private commercial and business schools showing an enrollment in 1925 of 188,363 students, who were being instructed by 4,105 teachers. This enrollment is a decrease from that reported for 1920, when 902 schools had an enrollment of 336,032 students. In 1924 the public high schools had 430,975 enrolled in commercial courses, which number is about twice the enrollment in similar courses in public high schools in 1916. The large enrollment in commercial work in high schools partly accounts for the reduction in the number of students in private commercial and business schools.

HIGHER EDUCATION

Three matters are of outstanding importance for higher education in the United States during the current year. The survey of engineering education, under the auspices of the Society for the Promotion of Engineering Education, has virtually been completed. The findings of the survey have been made available, and the engineering colleges of the country are applying the principles developed in the course of the study to their local problems, in so far as conditions permit. A resurvey of the negro colleges and universities of the United States has been arranged and is in progress. This survey will give a picture of the progress of these institutions since the period covered by the report made in 1916. Upon the initiative of the Association of Land-Grant Colleges and Universities a survey of the land-grant colleges has been undertaken by the Bureau of

Education. Congress has appropriated the money for this national study, which affects so generally the State and federally supported institutions. Surveys of individual institutions and of State higher educational systems will doubtless continue, but the fact of three nation-wide surveys indicates the tendency to consider higher education from a national viewpoint.

RURAL EDUCATION

Progress in rural education has been concerned largely with the following activities: Securing more generous appropriations for schools, particularly from State sources, and establishing better methods of school support; raising qualifications of teachers through laws and regulations governing certificates; improving facilities for pre-service and in-service training of teachers; curriculum revision; improving organization and facilities in State and county education departments and in rural schools.

Changes affecting the sources and methods of school support have been influenced by the economic depression affecting farmers. Retrenchments in important school programs due to this situation have served to bring nearer to a culmination a growing realization of the necessity of placing rural school systems on a sounder economic basis if educational results achieved are to be comparable to those in urban communities. In approximately 15 States careful research studies of the methods of support in practice have been made. These have set forth recommendations for improvement, and much of the legislation advocated and enacted during the 1927 sessions of the legislatures either resulted from or was influenced by these studies. Practically all of the reports have emphasized the necessity of a nearer approach to equalizing educational opportunity and tax burdens within the State studied, and because of the wide circulation given them, the school finance problems discussed have received unusual attention. Among the States which have reported definite revisions of the laws governing State school funds or secured appropriations providing for more generous support from State sources during 1926–27 are Georgia, Illinois, Kentucky, Louisiana, Maine, Massachusetts, Mississippi, Nebraska, New York, Pennsylvania, South Carolina, and Tennessee.

The movement for improving schools by raising standards of qualifications on which teaching certificates are based has long been in progress. By the end of the year 1927 four States—Connecticut, Pennsylvania, Utah, and Washington—will have reached the minimum scholarship prerequisite previously set up of graduation from a standard normal school for the lowest grade of certificate issued to inexperienced teachers. In addition to setting up higher minimum

prerequisites for the lowest-grade certificate, a number of States have raised standards of scholarship requirements for all or other grades of certificates. More professional training and more specialization are required and a greater number of special types of certificates are issued than ever before. Special certificates for elementary principals, for high-school principals, for teachers of special classes, for teaching adults, and for carrying on research work are issued under provisions of the more recent laws or regulations.

The nation-wide interest in the improvement of school curricula has extended to the field of rural education. A number of States and counties are revising their curricula with the idea of better adapting them to needs of rural schools. State departments of education responsible for making new courses of study are following modern practices in curriculum making as never before. In general, States are depending on the State course of study with local adaptations and made with particular reference to the needs of rural schools as a guide for school officers. However, in at least one State, Maryland, separate courses, one for each county, are in continuous process of formation by teachers and supervisors, with general direction from the State education department. Mimeographed sheets are prepared, used by teachers, and changed as experimentation suggests to be desired.

Curriculum adjustments to meet the needs of those rural communities in which school terms are short and for more effective use in one and two teacher schools are being made in a number of States. The trend is toward a curriculum revision designed to provide an intelligent distribution of the teacher's time among groups of children and among subjects; toward finding an effective balance between the desirability of providing for individual instruction and of retaining the socializing values of group instruction; and giving through the courses of study specific help to teachers in those problems peculiar to rural communities, particularly those served by small schools.

In the field of teacher training, progress has been through raising standards of entrance requirements of students enrolling for courses in rural education; lengthening curricula offered; differentiating curricula to afford more specific preparation for service in rural communities; extending the practice of basing courses on professionalization of subject matter; and increasing the amount of observation and practice teaching by students in training. Curricula designed especially for the preparation of teachers for rural schools are given in more normal schools and teachers colleges than at any previous time. Since 1923–24 the number of higher institutions offering such specialized courses has increased from 122 to 152.

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Normal school curriculum revision committees have been at work and have completed or have in progress new curricula for the institutions concerned in Louisiana, Pennsylvania, Mississippi, Virginia, Oklahoma, Massachusetts, New York, and Connecticut. There is also wider recognition of the value of supervision of graduates during their first year of teaching experience by members of the faculty of the training institution.

Despite the fact that there has been a slight falling off in the number of county rural-school supervisors employed, rural-school supervision has made noteworthy progress in improvement of techniques followed, in effective organization of supervisory staffs, in ability to work with and through principals of consolidated and other large rural schools in extending the scope of the supervisor's influence and improving the quality of instruction. The falling off in numbers has been due in large part to the economic depression, aggravated by dependence on local taxation as the chief means of school support, and consequent inability to raise the money necessary to secure and retain adequately prepared supervisors.

The number of State conferences for county superintendents who have no supervisory assistants has increased, and the quality of the conferences has improved. Higher institutions in several States, notably Missouri, Texas, Oklahoma, and State departments of education in others—New York, Connecticut, Montana, for example—are providing "short courses" for superintendents in which intensive work in instructional supervision is emphasized. A few States have enlarged their staffs of State supervisors in order that more and more practical assistance can be given county superintendents in improving their teaching staffs. In Connecticut a reorganization of the supervisory force in small towns (under State direction) is taking place. Territories of the more successful supervisors are being enlarged and with them women primary supervisors are being associated.

The second conference for supervisors in the Southeastern States called by the Commissioner of Education, held in Raleigh, N. C., December, 1926, revealed the fact that supervisors in these States had made considerable progress since the preceding conference, particularly in adapting supervision to the varying abilities of teachers classified in homogeneous groups; participating in and using the results of recent research studies for the improvement of supervisory technique; improving cooperation between supervisors and principals. The conference resulted also in the initiation of two important research studies to be carried on during the coming year.

In secondary schools located in rural communities grade reorganization (including some form of junior high school plan) and corresponding curriculum revision in the direction of broadening and enriching school offerings have continued during the year. A num-

ber of studies of the small high school have been initiated. One now in progress, in which a subcommittee of the National Committee on Research in Secondary Education is cooperating with the Bureau of Education, is of special importance. The junior college extension of the secondary school has so far reached few rural communities.

Consolidation of school units in the country as a whole has progressed during the year at about the same rate which has prevailed for the past seven years. Mississippi reports unusual progress, with 78 per cent of the rural children enrolled in consolidated graded schools, which have a minimum term of eight months. North Carolina reports about one-third of the rural children enrolled in consolidated schools of seven or more teachers. It is estimated that there are approximately 16,000 consolidated schools in the United States at the present time. Forty-two States reported nearly $31,000,000 spent for pupil transportation during 1925, the last year for which full data are available. Of the 32 States which have so far reported transportation costs for the year ended 1926, all but 4 show larger amounts than for the previous year.

New York and Pennsylvania are among the States which passed important legislation during the year affecting school consolidation. In both, State aid to transportation was materially increased. From several other States minor changes in the laws which facilitate either consolidation or transportation have been reported.

There has been considerable progress in improving the organization of consolidated schools and the quality of classroom instruction. This is indicated by replies received in the Bureau of Education to an inquiry sent in connection with a study in progress concerning organization and quality of instruction in consolidated schools. Of the principals from whom reports have so far been received, 50 per cent or more report classification of pupils in ability groups; participation in educational research; better trained teachers, the majority of whom are now college graduates; and free time for supervision provided for principals.

There has been an unusual output of professional literature of high quality in the field of rural education during the year. A number of theses and dissertations prepared or under way by graduate students in higher institutions of learning concerned with rural education have been reported to the bureau and many articles of high professional quality have found their way into various educational magazines during the year. A recent bibliography of rural education published by the Bureau of Education (Bulletin, 1927, No. 4), compiled by a joint committee of the department of rural education of the National Education Association and the division of rural education of the Bureau of Education, includes approximately 500 titles of important contributions in this field during a five-year period.

CITY SCHOOL SYSTEMS

Curriculum revision is one of the movements that have without doubt occupied the attention of superintendents, supervisors, and teachers more than any other movement. For some time professional school people and laymen as well have been of the opinion that the multiplicity of studies and topics crowded into the elementary school curriculum has impoverished rather than enriched it. Curriculum makers are accordingly making careful studies to see what topics may be omitted and what ones may be organized in larger units so that the pupils may have a better knowledge of those things most worth while.

The revised arithmetic courses of the past year illustrate the tendency to eliminate obsolete topics. The old-time arithmetician would scarcely recognize a textbook made to conform with an arithmetic course prepared in 1927. He would find that most of the obsolete problems and most of those used only by specialists have been omitted and that the course is confined largely to the fundamentals and their practical application.

Although progress has been made in curriculum revision, much more remains and always will remain to be done. The new point of view is that the curriculum should be in process of revision all the time, since conditions are continually changing and since our knowledge of child life is being continually modified by new discoveries regarding the child's nature and his individual and social needs.

Questions have been raised not only regarding the elementary-school curriculum but regarding the secondary-school program of studies as well. It is generally agreed that elementary-school work can be completed in six years, but the question is what can be done within the next six years. As the secondary schools are now being organized three years are devoted to junior high school and three to senior high school work. It thus still requires 12 years (13 years, including kindergarten) to complete the elementary and secondary school courses. The two "lost" years in the American school system have not been found, especially for those students preparing for college.

Time, however, is being economized in the sense that the courses of study in the real junior high schools provide for a better use of the pupil's time than did the courses of the seventh and eighth grades under the 8–4 plan.

In some cities of the country the schools are organized with seven years in the elementary grades and four in high school, making the public-school course but 11 years in length, exclusive of the kindergarten course. In these cities one of the "lost" years has been found. Possibly the other one could be found, too, if careful and comprehen-

sive studies were made of the secondary-school program. Possibly those cities now organizing junior colleges could find a way of including the junior college in the six-year secondary-school program.

Interest has been shown not only in the education of children of school age but also of preschool age. One city has added a nursery school for these children as a laboratory for its department of research in which the school workers in psychology, educational theories, and in home economics cooperate. Another has two nursery schools as laboratories for its high-school students registered in home-economics courses, and still another has made the nursery school a part of its department of kindergarten-primary education. In three cities nursery schools are housed and equipped by the public-school system, while the teachers' salaries and other current expenses are met by cooperating universities or other educational organizations.

Evidence of the tendency to consider the kindergarten an integral part of the school system is shown in the preparation of teachers and in the supervision of teachers in service. Approximately 200 teacher-training institutions make a special point of providing training for kindergarten or kindergarten-primary teachers. Of this number more than 80 per cent combine the kindergarten and primary work in one department, eliminating former tendencies to segregate the kindergarten courses. Approximately half of this work is now given on the collegiate level.

Eighty per cent of the school systems which provide supervision for their kindergartens combine it with that for the primary grades. This helps to unify curricula, methods of teaching, and types of equipment and supplies provided for all grades of the kindergarten-primary unit. This insures greater continuity for the children's educational experiences.

Interest in evening as well as in day schools is growing. In the cities of the country there are thousands of young men and women employed during the day who are attending evening schools, and thousands of others would attend if given the opportunity. Lack of funds is often given as one of the reasons why evening schools are not organized or why those already organized have not been expanded, but no better investment of public funds could be made.

Although millions of dollars are being expended each year on school buildings there are still many children on part time. Many are attending school in basement rooms and portables, and others are required to sit in badly lighted and badly ventilated classrooms in buildings erected years ago when but little thought was given to lighting and ventilation and when the program of studies was limited to the three R's.

The demand for more school buildings has arisen not only because of the natural growth in population but because a larger proportion

of children remain in school longer. The high-school enrollment has gone forward at such an astonishing pace that few cities have been able to provide adequate accommodations for their secondary school enrollment. Cities that have adopted the junior high school plan are erecting junior high school buildings, which help relieve congestion both in the elementary and high-school grades.

It is gratifying to report that in many cities the new elementary-school plants include gymnasiums, auditoriums, playgrounds, shops, nature-study rooms, libraries, and the like to meet the needs of the city child of to-day. But in spite of the need for all these facilities some boards of education are not including them in the plans of the new elementary-school buildings on the ground that they add too much to the cost of the buildings.

A plan of school organization known as the platoon plan has, however, been devised whereby auditoriums, gymnasiums, etc., may be included in elementary-school buildings without adding to the cost, since fewer classrooms are needed when a school is organized on the platoon plan. At first the platoon school was looked upon as a radical departure, and predictions were freely made that it would not be adopted by many school systems. To-day, however, 121 cities have one or more of their schools organized on the plan, and others are contemplating organizing platoon schools as soon as possible.

During the year there was no great increase in teachers' salaries, but some salary schedules were revised so as to provide equal pay for teachers with equal training and experience, whether they teach in the elementary school or in the high school. No doubt such schedules will help to place elementary-school teaching on a higher plane if teachers with four years' normal school or college work are employed to teach in the elementary grades. Such schedules should at least offer an incentive to those who are not college graduates to add to their present educational and professional equipment.

PHYSICAL EDUCATION AND SCHOOL HYGIENE

The most important event in the realm of school hygiene has been the public announcement of the methods for combating dental decay evolved in the Forsyth Dental Dispensary, Boston. The dental problem in school children has been so overwhelming that nowhere in this country has it been adequately dealt with. The source of rotting teeth, which 90 per cent of school children exhibit, lies in faulty feeding before and after birth, and while this condition in the developing child will be corrected in time, the next best thing is to find the faults of construction in the teeth (the pits and fissures of the enamel in which decay begins) and remove these at the earliest mo-

ment. Details regarding this work are furnished in the bulletin entitled "Better Teeth," which was issued by the bureau in June.

The Commission of the Organization for the Hard of Hearing has completed its study of the best methods of finding those children whose hearing is defective and of giving special aid to those who need it, in order that they may secure the most benefit from their school work. This report will soon be issued by this bureau.

There has been a marked increase in the sight-saving classes in this country in the past year and these now number 265.

The State of Florida has passed a law requiring the teaching of physical education and hygiene. The State director of this work, who has been paid by voluntary agencies, will now become a member of the staff of the department of education. The State of Ohio is also to have a State director of hygiene and physical education.

The problems of ventilation are far from solved either in theory or practice, and the New York commission, which has done so much along this line, has resumed its studies.

Three studies of health work in colleges were published the past year—that by W. E. Forsythe, by the University of Michigan; that by Dr. Thomas W. Storey, by Stanford University; and that by Dr. Marie M. Ready, of this bureau.

A study of athletics in colleges is being made by the Carnegie Foundation for the Advancement of Teaching. The result of its preliminary investigation of college sports abroad was published recently under the title "Games and Sports in British Schools and Universities."

Investigations of the status of teaching of hygiene in secondary schools have been carried on the past year, notably by Miss Laura Cairnes, of the University of California; by F. L. Stetson, of the University of Oregon; and F. W. Cozens, of the University of California, at Los Angeles. The results of the study by the last two persons have been published by the University of Oregon. Statistics recently gathered by this bureau show that in not more than 25 per cent of our high schools is physiology and hygiene a required subject; when offered, it is taught by a variety of specialists and most often by the teacher of physical education. There has been an increasing demand by secondary schools that physical-education teachers be fully prepared to handle this kind of work, though at present this is not always considered in their preparation.

ADULT EDUCATION

The one word that characterizes the field of adult education in the year just past is "growth." The number of people who have used the term with some personal application has greatly increased. There has also been an increase in the number of those who have taken the

words "adult education" as a challenge to endeavor to understand their relationship to the world in which they live. This means that a sympathetic effort will be made to secure mental development to the end of life, which will bring a broader mental horizon and enlarged sympathies that result from better understanding. In the elementary application of the term "adult education" there has been progress in the development of the program that has as its objective the bringing of opportunity to the millions whose early education was neglected.

To realize the activity in this field one has but to observe the amount of comment that has appeared in the public press and to note the relatively large number of books that have been published on the subject during the year.

Some public libraries have added specialists in adult reading to serve their adult patrons who desire help in outlining courses of special study. The American Library Association has issued excellent bulletins on adult education for the use of their librarians and for the public in general. In addition to the 31 reading courses published by this bureau, many lists and suggestions for systematic reading have been issued by various National and State organizations in an endeavor to meet the growing demand for such aids.

During the past year several State departments of education have added to their staffs special officials whose duty it is to organize and supervise educational work for adults.

On account of the fact that children of parents who have had little or no schooling are so difficult to interest in their school work, educators appear to see more clearly than ever before the importance of the education of parents for the sake of their children, if for no other reason. In cases where parents can be induced to attend evening school there is usually an improved attitude on the part of their children toward school. Parental education is receiving much attention by parents and educators as is evidenced by the increased number of articles on this subject which appear in newspapers and magazines.

The education of the foreign born has been undertaken more seriously by a number of States than in previous years. In those States where State aid is given to school districts which provide evening schools for adults much progress has been made. In some cities, even where no State aid is given, much has been accomplished through evening schools.

Non-English-speaking mothers are now being given more attention by school departments than ever before. It has been found that the best way to start this work is by holding classes for these women in their own homes or in the homes of their neighbors in the afternoons.

Colleges and universities, by extension methods, are reaching larger numbers of those who wish advanced work. More than 300 colleges

and universities during the past two years gave extension work. There has been a very rapid increase in the number of adults who attend summer sessions of higher educational institutions.

INDUSTRIAL EDUCATION

The past year has witnessed some interesting attempts to provide industrial courses for pupils in small communities. On account of the cost of shop equipment and the added expense of a special teacher, the small schools have been slow in providing shop courses. Where schools have been centralized these difficulties have been largely overcome. The growth of consolidated schools is closely paralleled by a corresponding increase in shop courses. A new scheme for providing shop work through the employment of an itinerant shop teacher has been undertaken by a small number of schools. The itinerant teacher works on a definite schedule, dividing his time among a sufficient number of adjacent schools to give him full-time employment. Usually the teacher travels by automobile from one school to another, carrying with him much of the needed hand-tool equipment. Each school bears its proportionate part of the salary of the teacher and the cost of the portable equipment. In some cases a part of the expense is borne by the county.

The need for specially trained teachers for manual-arts work has recently led a few large cities to develop cooperative arrangements with teacher-training institutions for the purpose of providing courses for their teachers in service. The city supervisor outlines the courses desired and furnishes a sufficient number of students from his list of teachers to warrant the teacher-training institution offering the course. There are various practices for carrying out such a program. Sometimes the instruction is given as extension courses, the classes being held in the city desiring the work. Sometimes a program is developed in connection with a local teacher-training school. In such a case the theoretical courses are frequently offered at the institution and the shop courses in the city schools. It is not unusual for the city school to furnish the shop instructor in such instances. Again the program may be developed as a summer course conducted at the teacher-training institution.

During the past year there has been a rapid increase in the number of schools offering courses in occupational information. With the general acceptance of the need for such work scientific studies relative to content material and instructional organization have been undertaken. There also has been an increasing number of schools introducing the general shop as an organization for teaching manual-arts work in the junior high school. This is especially noticeable in the smaller school systems. The opportunities for industrial training

on the part-time and evening-school basis have been greatly extended, with a consequent increase in enrollment.

HOME-ECONOMICS EDUCATION

The year has been characterized by marked research activities in various phases of home-economics education. Significant among these have been those concerned with curriculum building.

Home economics, whether city or State supervisors, teacher trainers, or classroom teachers, have applied the principles of modern psychology, sociology, economics, and the natural and biological sciences to the building of home-economics curricula designed to meet the physical, economic, social, and prevocational needs and interests of school girls of varying ages. Such research activities have been especially pronounced in the States of California, Colorado, Georgia, Illinois, Michigan, Indiana, Ohio, New York, Pennsylvania, Massachusetts, and Maryland.

Among other significant achievements have been (1) an increasing number of nursery schools established in home-economics departments of higher educational institutions; (2) inclusion of child development and parental education work in a large number of elementary and high school home-economics courses; (3) procurement of funds by the American Home Economics Association for the development of a child-welfare center in Washington, D. C.; (4) general attitude on the part of high-school administrators to assign as much time and credit to home economics as are allotted to any other high-school subject; (5) increasing recognition by women's colleges of high-school home economics for partial fulfillment of college entrance credit in these institutions; (6) growing attitude on the part of parents and public-school administrators for the need of some home-economics instruction for boys as well as for girls; (7) increasing number of cities offering prevocational home-making opportunities to the overaged girl; and (8) development in one State of home-economics courses designed to meet high-school graduation requirements of two units in general science and one in social science.

COMMERCIAL EDUCATION

The outstanding events in secondary commercial education during the past year center around curriculum revision. The objectives have been to refine earlier analyses of the needs and to seek improved instructional methods in order to increase the efficiency of preparation for business occupations. The chief contributions have been studies of commercial-teacher training, commercial occupations, office equipment, clerical salaries and related topics, job analyses, and researches in methods of instruction. In this movement a renewed

emphasis has been placed on the necessity of a complementary relationship of the seven cardinal objectives in the commercial curriculum and the necessity of appropriate and adequate vocational preparation of each pupil who contemplates earning a livelihood in a business occupation.

The outstanding contributions pertaining to the junior high schools were (1) the report "Junior Commerce Curriculum," by the department of superintendence, National Education Association, and (2) "The Course of Study for Junior Business Training," published by the board of education, Philadelphia, Pa. The tendency is definitely toward introducing general business information, elementary clerical content, and typewriting in these schools.

The commercial-occupation study conducted in Pasadena, Calif., which was published by the local board of education, and the study of clerical occupations conducted by Harvard University in cooperation with the National Association of Office Managers are outstanding contributions. These and earlier occupational studies resulted in greater emphasis on the needs for retail selling, diversified clerical, and machine-operating courses. They have been the bases for some important conferences on these subjects.

A larger number of worthy commercial teacher-training studies were completed than in any previous year. The outstanding contributions were reported from New York University, Columbia University, State University of Iowa, Northeast Missouri State Teachers College, Grove City College, Pa. The National Commercial Teacher-Training Association was formed in February, 1927.

The first general meeting of the International Association for Commercial Education was held in Zurich, Switzerland, on September 25, 1926.

LIBRARY ACTIVITIES

The growth of library cooperation, both intranational and international, and the promotion of adult education were two very conspicuous aspects of the activities of American libraries during the past year.

Much attention has recently been devoted to devising means by which the book resources of libraries over considerable areas of territory, even of the entire United States, may be so organized that a reader or investigator in any part of the country served may have at his disposal the contents of a large group of libraries, and may be supplied with the needed book from the library having it, under a system of interlibrary loans. The county library undertakes to render this service for an entire county as a unit. California and New York are examples of practical unification of the library resources of entire States under the leadership of their respective State libraries. Progress toward a central record of the contents of lead-

ing American libraries is being made by the formation of a union card catalogue at the Library of Congress, and by the compilation in book form, by a committee of the American Library Association, of a union list of serials. Plans are under way for preparing other similar general guides to American library resources.

The impulse toward library cooperation transcends international boundaries and pervades all civilized lands. The fiftieth anniversary conference of the American Library Association in 1926 was attended by a large number of official delegates from foreign countries, who addressed the meeting and afterwards visited many leading American libraries. American delegates attended the International Congress of Librarians at Prague, Czechoslovakia, in 1926, and a large group of librarians from the United States is expected to attend the fiftieth anniversary meeting of the British Library Association, to be held in England in 1927. The American Library Association is itself an international organization, drawing its membership from both the United States and Canada. Its annual meeting was held June 21–26, 1927, in Toronto, Canada, with the public librarian of that city presiding, and with delegates from Great Britain participating. Exchange of library assistants has been found of advantage in various parts of the United States, and an international exchange of this sort seems possible within the near future.

Librarians are prominently participating in the adult education movement in the United States. The commission on the library and adult education, appointed by the American Library Association in July, 1924, to study the problem of adult education in its relation to libraries, has been succeeded by a permanent board on the library and adult education, created by the association in October, 1926, to continue work along this line. In 1926 the commission on the library and adult education published an extensive report of its studies. The sessions of an adult education round table at the Toronto meeting of the American Library Association were largely attended. With a view to improving library methods in adult education, a special committee of the American Library Association is making a study of the development of reading habits.

The year was also marked by the erection of various noteworthy buildings, both for public libraries and for those of colleges and universities.

II. Work of the Bureau of Education

A. GENERAL

1. Research

(a) studies completed

During the year the following studies by members of the staff of the Bureau of Education were brought to completion:

Higher education.—(1) Expenditures of State universities and colleges, 1924–25; (2) graduation requirements in electrical engineering; (3) graduation requirements in chemical engineering; (4) graduation requirements in mining engineering; (5) effect of the junior high school upon college entrance requirements; (6) current statistics relating to enrollment, salaries, budgets, etc., of State universities and colleges; (7) current statistics relating to enrollment, salaries, budgets, etc., of State teachers colleges and normal schools; (8) study of engineering curricula.

Rural education.—(1) Biennial surveys of rural education, secondary education, and rural educational surveys, 1924–1926; (2) "A Manual of Educational Legislation"; (3) study of State laws and regulations governing teachers' certificates in force 1926; (4) bibliography of certain aspects of rural education; (5) bibliography of secondary education research for 1925–26; (6) administration of junior high schools in rural and small-school communities; (7) achievement of pupils in one-room and larger rural schools: (8) school consolidation and pupil transportation at public expense; (9) time distribution of supervisors in the Southeastern States during the school year 1925–26; (10) plans used by supervisors during the school year 1925–26 to discover and develop potentialities of superior teachers; (11) titles of articles in books and current magazines of special interest to rural-school supervisors and those engaged in preparation of rural teachers; (12) circulars prepared for use at the American Country Life Association Conference on Education and Farm Youth, United States Rural Population for Age Groups 10–20, 1920, The Status of Farm Youth; (13) ten circulars of information on courses offered in teacher-preparing institutions; schools and officials responsible for and other information relative to the preparation of rural-school teachers.

City schools.—(1) Administrative phases of nursery-school education; (2) growth of enrollment in kindergartens of 194 cities; (3) extent to which the kindergartens and primary grades have been placed under the supervision of the same person; (4) regulations in the several States regarding the certification of kindergarten and primary grade teachers; (5) extent to which teacher-training institutions preparing kindergarten teachers combine this training with that for the primary grades; (6) use of State parks and forests for rest and recreation and for wild-life sanctuaries; (7) music in platoon schools; (8) auditorium activities in platoon schools; (9) training teachers in service for platoon schools; (10) the organization and supervision of platoon schools; (11) general survey of the work-study-play or platoon plan; (12) the philosophy and administration of the work-study-play plan; (13) training prospective teachers for platoon schools; (14) method of grouping elementary, junior-high,

and senior-high school pupils into homogeneous groups, including features of the Winnetka technique and of the Dalton plan used in cities of 10,000 population and over; (15) length of school day in cities of 30,000 population and over; (16) recent movements in city school systems; status of kindergarten education, 1924–1926.

Physical education and school hygiene.—(1) Requirements of State departments of education for directors and supervisors of physical education; (2) economic equipment for school playgrounds and management of play activities; (3) dental hygiene for schools; (4) physical education in foreign countries.

Adult education.—(1) Activities of State departments of education in the field of adult education; (2) investigation of the organization and administration of public evening schools; (3) progress of extension education in universities and colleges; (4) administration of schools for adult native illiterates in Buncombe County, N. C.

Industrial education.—(1) Private and endowed schools offering trade and industrial courses; (2) objectives for the manual arts; (3) development of occupational information courses; (4) growth of the general shop.

Home-economics education.—(1) Statistical study of home economics in the high schools of the United States; (2) achievements in home economics during 1924–1926; (3) child development and parental education as taught in public and private schools.

Commercial education.—(1) Commercial education surveys; (2) bibliography of research studies in commercial education; (3) need of research in commercial education; (4) total number of persons in the United States pursuing commercial subjects.

School legislation.—(1) Legal status of the municipal university; (2) State laws relating to the teaching of the effect of alcohol and narcotics; (3) State laws relating to part-time, continuation, and evening schools; (4) State laws restricting foreigners from teaching in the public schools; (5) education required in the various States for labor permits; (6) proposed school legislation in different States.

Foreign education.—(1) Public education in Estonia; (2) educational progress in the Free City of Danzig; (3) certificates issued by the Scottish education department.

(B) STUDIES IN PROGRESS

Higher education.—(1) Statistics of land-grant colleges for the year ending June 30, 1926; (2) fiscal relations of State universities; (3) administrative organization of higher educational institutions in the United States.

Rural education.—(1) Biennial survey of progress in teacher training, 1924–1926; (2) facilities for and administration of courses in

observation and practice teaching provided by State teacher-preparing institutions in the two-year curricula for elementary rural school teachers; (3) progress in school consolidation in the United States; (4) administration, organization, and transportation in selected consolidated schools in each State; (5) possibilities and methods of developing principals of rural elementary schools as supervisory officers through whose assistance rural supervisors will be able to reach a larger number of teachers; (6) teachers' meetings in several Southeastern States; (7) distribution, qualifications, and duties of rural-school supervisors; (8) State direction of library service for rural schools; (9) a decade of progress in rural education.

City schools.—(1) Educative value of building blocks for children in nursery school, kindergarten, and primary grades; (2) city-school supervision provided for kindergarten-primary grades and the administrative phases of the organization of supervisory units; (3) type of training offered for kindergarten-primary teachers in public and private normal schools and in educational departments of colleges and universities; (4) the auditorium in platoon schools; (5) the organization of platoon schools; (6) buildings for platoon schools; (7) special activities in platoon schools; (8) bibliography of platoon schools; (9) costs of school buildings; (10) safety education; (11) current practices and changes in administration of schools in cities of 30,000 population; (12) supervision in the larger urban high schools; (13) city school survey reports for the period 1922–1926.

Physical education and school hygiene.—(1) Status of physical education in the public schools of the United States in cities over 10,000 population; (2) posture of school children; (3) status of school hygiene in the United States; (4) status of hygiene and physical education as required subjects in teacher-training courses.

Adult education.—(1) Educational opportunities offered to inmates of prisons in the United States; (2) contributions of various national organizations toward the reduction of illiteracy in the United States; (3) various types of part-time education in the United States; (4) opportunities offered for adults to further their education through college and university extension; (5) best methods of reducing illiteracy in the United States.

Industrial education.—(1) Types of part-time industrial education; (2) methods of grading the work of students in industrial classes; (3) results of mechanical performance tests; (4) local surveys of industrial opportunities for negroes; (5) curriculum study in life activities for industrial education.

Home economics education.—(1) Home economics in one-room rural schools and consolidated rural school districts; (2) home economics for boys in high schools; (3) nutrition as taught in the public schools of the United States; (4) developments in home-economics

education in the United States since 1922; (5) home-economics educational methods used in rural and urban high schools of the United States.

Commercial education.—(1) Research in commercial education; (2) commercial education in junior high schools; (3) part-time commercial education; (4) collegiate education for business.

School legislation.—(1) State laws relating to compulsory education; (2) State laws relating to educational relief of dependent and neglected children.

Foreign education.—(1) Ministries of education in foreign countries; (2) illiteracy in various countries of the world; (3) the minority language situation and its relation to education; (4) education in Mexico.

2. Educational Surveys

Educational surveys constitute a most important phase of the service of the Bureau of Education. This service has been increasing in quantity in recent years. From the establishment of the bureau in 1867 a total of 203 educational surveys has been made under its auspices, of which number 88 have been made since 1921. These surveys covered the whole of continental United States, as well as Hawaii and Porto Rico. They may be classified as follows:

National (study of negro education)	1
State systems of education	11
State systems of higher education	10
County systems	22
City systems	26
Building programs in city systems	15
Higher educational institutions	98
Miscellaneous	20
Total	203

During the fiscal year just closed the Bureau of Education has completed several important surveys. A survey of the State system of education in Utah was begun in April, 1926, and completed in October. This study is probably the most exhaustive work of its kind which the bureau has yet performed. A complete array of facts regarding education in the State of Utah was assembled as well as a prodigious amount of data for purposes of comparison. With these as a basis, constructive recommendations were made to the State authorities looking toward the improvement of the system. Many of the recommendations made have already been adopted in the State and the report is generally regarded as a guide for future development.

A survey of the normal schools of the District of Columbia was begun in January, 1926, and a report published in mimeographed form in October of the same year. Sixteen recommendations were made. Of these, 15 have been adopted in principle by the District

board of education. Of those adopted and now in operation the most important is that of lengthening the course of study from two to three years.

A survey of Rutgers University, the State university of New Jersey, at New Brunswick, was begun November, 1926. The report was completed in May and has now been published. A number of important recommendations made by the survey staff have been adopted, including changes in the membership of the board of trustees, employment of a competent comptroller to reorganize the financial methods of the institution, and definite steps toward the improvement of the physical plant.

In addition to these studies, a survey was made of the organization of the board of education of New Castle, Pa., and its operations. The report submitted by the bureau was adopted practically in its entirety.

A survey was made and plans prepared for the athletic grounds of Roland Park School, Baltimore, Md.

During this year arrangements were perfected for the beginning of two national surveys by the Bureau of Education, one of which is to be on an unprecedented scale. These are respectively a study of the negro colleges and universities of the United States and a study of the land-grant colleges of the United States and its Territories. The negro-college study is well under way. The field work, consisting of 67 institutions, has been completed and a report is in process of preparation. The study of the land-grant colleges was authorized by the Congress during the last session. It is estimated that the work will require two years and involve a cost of $117,000. Congress appropriated the sum of $61,000 to cover the expenses of the first year's work. This study has been launched and a number of specialists have been added to the staff of the Bureau of Education for purposes of this study.

3. Conferences

The following conferences were called by the commissioner of education:

(1) Conference of State and local supervisors of rural schools in the Southeastern States held at Raleigh, N. C., December 6–7, 1926.

(2) Conference for those engaged in the preparation of rural teachers held at Dallas, Tex., February, 1927, during meetings of the department of superintendence.

(3) Conference of institutions giving professional training in physical education, which was largely attended. The following subjects were discussed: Objectives in physical education, entrance requirements, curriculum, preparation of teachers for the field of

health education, specialization for physical education, and the location of the physical-education training course in a university. A committee was appointed to work out a standard nomenclature for curricular subjects, and the Council of the American Physical Education Association was asked to continue its efforts to secure a survey and classification of schools. This conference was held in Washington, D. C., March 30, 1927.

(4) Industrial education dinner conference, conducted as part of the program of the American Vocational Association, Louisville, Ky., in December, 1926. The general topic for the conference was "Necessary preparation of individuals for vocational training." Well-known leaders in vocational education spoke on various phases of the subject, including guidance, occupational levels, and try-out courses. Two hundred and fifty people were present. Report of the proceedings has been issued by the bureau as Industrial Education Circular No. 27, 1927, "Values of the Manual Arts."

(5) The second national conference of home-economics supervisors, held in connection with the twentieth annual meeting of the American Home Economics Association, in Asheville, N. C., June 20, 1927. The program of this conference, which was attended by about 300 workers in the field of home economics, included discussions of the following subjects: (1) Home-economics objectives; (2) bases for home-economics curriculum building; (3) scope of child development and parental education in the home-economics curriculum; (4) household budgeting course as a means for social orientation of high-school boys and girls. Out of this conference there developed the Organization of City Supervisors and Teachers of Home Economics of the United States, more than 30,000 in number.

(6) In addition to the conferences called by the Commissioner of Education, the Bureau of Education participated in the Pan-Pacific Conference on Education, Rehabilitation, Reclamation, and Recreation, called by the President of the United States in conformity with a joint resolution of Congress and held at Honolulu, Hawaii, in April, 1927. The Commissioner of Education organized and conducted the educational section for this conference. An educational exhibit was prepared and displayed during the sessions. Twelve countries bordering on the Pacific were officially represented in the conference in addition to several other countries which were unofficially represented. The report of the proceedings of the conference has been printed by the Department of the Interior, as authorized by Congress.

4. Cooperative Undertakings Other Than Conferences

(1) Cooperation with the department of rural education of the National Education Association in directing research in the field of

rural education. Bulletin, 1927, No. 4, "A bibliography of certain aspects of rural education," was prepared.

(2) Assisted committee of Country Life Association in planning for the annual conference of that association; prepared circulars of information for use at the conference. A report on a decade of progress in rural education is now in preparation in cooperation with a committee of this association.

(3) Cooperation was continued with the National Committee on Research in Secondary Education. Routine work connected with the office of the secretary of this organization; preparation for conferences, etc.; preparation of mailing list of professors and research workers in secondary education; cooperation in preparation of bibliography of current research undertakings, March, 1927 (mimeographed); bibliography of completed research studies 1925–26; study of junior high schools in rural and small school communities.

(4) Advisory service for Southern Woman's Educational Alliance, Woman's Universal Alliance, education committee of the National League of Women Voters, education committee of the American Association of University Women.

(5) Cooperation with the Washington Institute for Research in Child Development in the organization of a research center in child development.

(6) Cooperation with a nursery school committee of 19 to assemble and distribute information of vital interest to nursery-school workers.

(7) Cooperation with eight committees making studies of different phases of the work-study-play plan.

(8) Cooperation with a committee of the department of adult education of the National Education Association in making a study of the field of adult education in order that a plan for better coordination of such work might be suggested. This involved attendance at several conferences held in Washington, D. C., New York City, Cleveland, Ohio, and assistance in the preparation of an 11-page mimeographed report which was presented at the meeting of the National Education Association in Seattle, Wash., in July, 1927.

(9) Cooperation with several national organizations interested in reducing illiteracy in the United States. This included suggestions as to methods of procedure which might be effective in campaigns to reduce illiteracy and attendance at both formal and informal conferences of such organizations as Chamber of Commerce of the United States, American Federation of Labor, General Federation of Women's Clubs, Colonial Dames of America, Daughters of the American Revolution, American Legion, and National Congress of Parents and Teachers.

(10) Cooperative undertakings with various schools for (1) giving a mechanical performance test developed by the Bureau of

Education; (2) local surveys to determine the industrial opportunities for negroes.

(11) In cooperation with a committee appointed by the Commissioner of Education prepared an exploratory and informational reading course for guidance of boys and girls contemplating preparation for business occupations.

5. Miscellaneous

(1) The credentials of foreign students from 50 different countries were evaluated. This represented an increase of full 50 per cent over the number of cases handled during the previous year.

(2) Translations were made of a large number of letters, documents, and other educational material from 23 different languages. This service included translations for outside agencies as well as for the Bureau of Education.

(3) Numerous articles on educational subjects were prepared by members of the staff for educational journals and other magazines.

(4) A rural school news letter was prepared and issued each month during the year.

(5) Display of educational charts, models, and pictures at the departmental exhibit held during the meeting in Washington of the American Medical Association.

(6) Assistance in planning school buildings was extended to localities in the States of Alabama, Kentucky, Mississippi, and Tennessee, and plans were made for the construction or reconstruction of school buildings in China, Japan, India, and Liberia.

B. HOME EDUCATION

The work in home education has been characterized during the past year by an increase in the demand for advice and consultation on parents' problems from individual parents, leaders of groups of parents, and others interested in parental education. Fully 57 per cent of those seeking advice through conferences on home education problems were National, State, or local leaders engaged in active work on problems of parental education. Assistance has been given through conferences, correspondence, material, and by participating in discussions and in the organization of groups for reading and study.

In 1926–27 the bureau again cooperated in the campaign to prepare children for their first entrance into school, conducted by the National Congress of Parents and Teachers, which made considerable gain over the previous year. It is reported that approximately 50,000 children were examined by physicians under the supervision of their parents and that nearly one-half of the defects discovered

were corrected. There was a 100 per cent increase in the number of States participating in this "round-up of children." To further this movement the bureau urged upward of 19,000 educators to cooperate actively, which resulted in prompt and favorable response from a large number of school superintendents and principals. A study of the campaigns of 1925 and 1926 is in progress.

The national committee on home education held its second meeting at the bureau in the fall of 1926. It was attended by representatives of the National University Extension Association, the National Congress of Parents and Teachers, the American Library Association, and the Bureau of Education. Two subcommittees were appointed, one to work out a plan of cooperation between extension divisions of universities and the Bureau of Education and the other to recommend ways and means of extending library service throughout the United States. A plan has been prepared by the first subcommittee named above.

During the past year considerable progress has been made in the project of home reading. A new method of procedure was instituted in handling the home reading of boys and girls through the cooperation of librarians and teachers. In North Carolina there were more than 700 readers enrolled who completed courses. There was an increase in the number of enrollments of readers of 67 per cent over those enrolled last year; the number of certificates issued for completion of courses during the year exceeded the total number issued from the inception of the courses to the close of the year 1926. Upward of 22,000 readers have been enrolled for the work. There were 2,380 enrollments during the past year. Of the more than 2,000 certificates that have been issued, 1,027 were issued during 1926–27.

Six reading courses have been revised during the year, a course on the appreciation of music added to the list, and several new courses are under preparation.

A section of the Biennial Survey of Education showing the progress of parent-teacher associations in States during 1924–1926 has been prepared.

C. ALASKA

During the fiscal year ending June 30, 1927, the field force of the Bureau of Education in Alaska consisted of 6 superintendents, 167 teachers, 8 physicians, 26 nurses, and 4 employees in connection with the reindeer service. Eighty-six schools were maintained, with an enrollment of 3,616.

In addition to maintaining schools for the native children, the bureau has continued its endeavors in behalf of entire communities by extending medical aid, by relieving destitution, by fostering the

commercial enterprises of the natives, and by supervising the reindeer industry.

Emphasis is being laid upon the expansion of the work of the industrial schools at Eklutna, Kanakanak, and White Mountain in southern, western, and northwestern Alaska, respectively. The work of the day schools, which is of undoubted benefit, requires to be supplemented by instruction in such useful trades as will enable the natives to meet the new conditions resulting from the advance of civilization. Centuries of experience in the use of such tools as they have possessed have developed among the native races mechanical skill of a high order. Many natives show talent along mechanical lines, and there is no doubt that the systematic vocational training received in the industrial schools will enable the natives successfully to compete with their white neighbors.

Educational statistics for the school year ending June 30, 1927

Total number of days in actual attendance	372,702
Total number of pupils enrolled during the year	3,616
Average daily attendance throughout the year	2,450.99
Percentage of attendance	89.10
Average number in schoolroom each day	29.16
Total number of schools open	86
Total number of schoolrooms open	137
Average number of days in school year	147.5
During the year there was spent for repairs on the school buildings and not counted as a part of the operation of the school	$12,231.01
Spent for new buildings	$40,599.29

The scope of the community service rendered by the teachers is indicated by the following table:

District	Visits made to homes	Medical assistance rendered	Births reported	Deaths reported	Native population	Teachers reporting
Central	2,993	5,780	41	41	1,424	22
Northwestern	581	2,000	15	9	2,136	22
Seward Peninsula	1,303	3,966	43	18	2,108	26
Southeastern	3,075	12,102	110	93	4,062	39
Southwestern	1,365	2,348	48	41	935	24
Western	4,097	7,515	55	50	1,740	30
Total	13,414	33,711	312	252	12,405	163

The bureau's vessel, the *Boxer*, continues to render valuable service in transporting appointees, equipment, and supplies from Seattle to their remote destinations on the coast, on the outlying islands, or on the great rivers of Alaska. Leaving Seattle in the spring, the vessel makes its first voyage of the season through the waters of southeastern Alaska and along the southern coast as far as Kodiak Island; on its second voyage it visits the settlements on the shores of the Alaska Peninsula and of Bering Sea; its third voyage is the long

cruise to the Eskimo villages beside the ice-bound waters of the Arctic Ocean as far north as Point Barrow. To many settlements the annual visit of the *Boxer* furnishes their only means of communication with the rest of the world. Its passengers are the teachers, doctors, and nurses going to or returning from their voluntary exile. Its cargo includes the lumber and hardware for use in constructing school buildings at places hitherto unreached by the bureau, the coal and food supplies required for a year, and a year's supply of the books, furniture, and equipment needed by the schools.

The most notable extension of the medical service during the year was the opening of a hospital in one of the buildings in the Fort Gibbon Military Reservation at Tanana, now abandoned, which have been transferred to the bureau. The village of Tanana, on the Yukon River where the Tanana empties into it, is advantageously located as a center for work among the natives of that entire region.

The Yukon River medical boat, having on board a physician and two nurses, in addition to the crew, was put in operation during the summer of 1926, and during its cruise covered approximately 2,200 miles. More than 3,000 of the natives scattered throughout the Yukon Valley were examined and about 500 treatments were given. The opportunity for securing medical aid afforded by the cruise of the boat was greatly appreciated by the white men in the isolated settlements along the river. A similar cruise is being made during the present summer. However, the regrettable information has been received of the death by drowning, on July 16, of the physician in charge of the boat.

The hospitals at Juneau, Akiak, Kanakanak, and Noorvik continued to render valuable service; and contracts were entered into with other hospitals in Alaska, as well as in the States of Washington and Oregon, for the treatment of Alaskan natives. Many native children were brought to Seattle for special treatment and delicate operations.

Statistics of medical service by physicians and nurses

	Nurses	Doctors	Total
Number of visits to homes	13,816	805	14,621
Number of patients treated	10,734	3,270	14,004
Number of treatments given	37,259	19,262	56,521
Number of births reported	101	65	166
Number of deaths reported	71	33	104
Total days of hospital care		10,438	10,438
Out and clinic patients	75	4,035	4,110
Out and clinic calls		4,442	4,442
Total cost of medical service		$147,710.58	

The reindeer industry, originating in 1891 to protect the Eskimos of the Bering Strait region against starvation, has assumed great

proportions and now presents problems which require serious attention. In the 10 years prior to 1902, 1,280 reindeer were imported into Alaska from Siberia. More than half a million reindeer now graze upon the vast, untimbered spaces of Alaska. The great increase in the number of herds, especially in the Seward Peninsula, rendered it urgent that provision be made for the allotment of grazing lands, in order that the occupancy of such lands might be regulated and strife among the owners of reindeer avoided. Authority for the establishment of grazing districts in Alaska by the Secretary of the Interior is contained in an act recently passed by Congress, and regulations to carry out its provisions are now under consideration.

Another problem in connection with the reindeer industry is the providing of a market for the surplus meat, which is now far in excess of local demands. Each year on its return from its Arctic cruise, the *Boxer* brings to Seattle a number of carcasses of reindeer belonging to the Eskimos, which have hitherto been sold for them in small quantities through the Seattle office of the Alaska division. With a view to accomplishing the wholesale disposal of this meat, the attention of the Navy Department was called to the possibility of including reindeer meat in its ration lists, with the result that instructions have been issued for the delivery to the Puget Sound Navy Yard of a considerable number of the carcasses which the *Boxer* will bring from northwestern Alaska at the close of its 1927 cruise.

D. LIBRARY

In its new quarters on the sixth floor of the Interior Building, adjacent to the other divisions of the bureau, the library, with all its collections now unified, has come into an improved position for functioning. During the past year, the library continued to add new material to its shelves, and its various services were rendered to an increased extent. Besides many typewritten and mimeographed bibliographies compiled by the division, three library leaflets—lists of references—were prepared for printing, as follows: No. 33, Vocational Guidance; No. 34, Secondary Education; No. 35, Higher Education. Four issues of the Record of Current Educational Publications were prepared for printing as bulletins during the year. Bulletin, 1926, No. 9, "Statistics of public, society, and school libraries, 1923," was published in December, 1926.

Considerable time during the year was necessarily spent in arranging the library books in their new location. The service of supplying copy for printed catalogue cards for educational books, in the Library of Congress series, was continued, and numerous volumes were lent to borrowers both within and outside Washington. An ex-

tensive correspondence was also handled, and an unusually large number of volumes were sent to the bindery.

E. PUBLICATIONS

Publications of the Bureau of Education between July 1, 1926, and June 30, 1927, included 33 bulletins; 3 city-school leaflets; 4 health-education publications; 2 higher-education circulars; 1 home-education circular; 3 industrial-education circulars; 1 reading course and 9 reprints of reading courses previously printed; 3 rural-school leaflets; the report of the Commissioner of Education for 1926; 3 statistical circulars; 12 numbers of the clip sheet; 10 issues of School Life; 3 miscellaneous publications; and 4 lists of the bureau's publications, general or special. Documents ordered but not yet delivered by the printer comprise 9 bulletins, 2 city school leaflets, 1 health-education publication, 2 library leaflets, and 1 list of publications.

The total number of documents printed is less by five than in the previous year and the average number of pages per document was reduced. As an outstanding example of the policy of reduction, the Biennial Survey of Education, which it has been customary to print in two volumes, was reduced in extent for the issue for 1922–1924 and was published in a single volume. The number of copies ordered of each document has also been materially lessened.

Notwithstanding its smaller size, the Biennial Survey of Education continues to be the most extensive and comprehensive publication of the bureau. Next to it in importance during the past year must be rated the report of the survey of education in Utah.

Statistical publications constitute the distinctive productions of the Bureau of Education. No other agency is able to produce educational statistics of nation-wide scope so successfully. Two documents issued in the fiscal year 1926 conspicuously exemplify this statement, namely, Bulletin, 1926, No. 9, Statistics of Public, Society, and School Libraries, and Bulletin, 1926, No. 11, Residence and Migration of University and College Students. Bulletin, 1926, No. 23, Biennial Survey of Education, contains the customary statistics of educational institutions, and other documents present statistics of institutions of different types.

The series of bulletins prepared especially for classroom teachers was continued in 1926 by the publication of "How the world rides." Another document of similar character, "Playgrounds of the Nation," is now in the hands of the printer.

Publication has been continued in accordance with established plans of the four publications that have appeared with some regularity for several years, namely, School Life, Record of Current Educational Publications, the Educational Directory, and the Clip

Sheet. All these appear at varying intervals except School Life, which is rated as a monthly periodical.

F. ACTIVITIES OF THE COMMISSIONER

During the year the usual heavy pressure upon the commissioner for field service has continued. The most important event in which the commissioner participated was the Pan-Pacific Conference on Education, Rehabilitation, Reclamation, and Recreation, held in Hawaii in April. Summarizing the year's work, a total of 83 addresses before various national, State, and other organizations chiefly of an educational character, was made and a distance of approximately 38,000 miles was traveled. The commissioner attended during the year the regular meetings of the Federal Board for Vocational Education and the Federal Board for Maternity and Infant Hygiene, acting as vice chairman of the former. During the year he presided at the meetings of the National Committee on Home Reading Courses and the Committee on Reorganization of Materials for the Curriculum, both of which were created by him. The commissioner published 28 articles bearing chiefly upon educational matters, and held approximately 400 conferences in his office in Washington with those seeking advice and assistance in educational matters.

G. RECOMMENDATIONS

The recommendations for the improvement of the service which were made in the last report are still applicable. Briefly these include:

(1) An enlargement of the activities of the Bureau of Education so as to make it more adequate for research in certain fields of education. During the year one or two additional specialists were added to the staff but a number of others are needed, particularly in fields relating to the curriculum, school financing, and school buildings.

(2) Expansion of the work in Alaska. The educational program in Alaska is more adequate than the medical service, while there is need of vigorous handling of the reindeer industry in the immediate future. Medical relief is extended to less than half of the natives, and some diseases which are ravaging the aboriginal people remain practically unchecked, the principal one of these being tuberculosis. The point has been reached in the reindeer industry where the enlargement of the herds is very rapid. In the early years increments came by the hundreds, now they come by the hundreds of thousands. At the present time there are no less than 500,000 deer in the Territory and they are increasing approximately 30 per cent annually. At certain places deer have become so numerous as to be almost valueless and are beginning to suffer from neglect.

It is recommended that it might be wise at this time to establish the schools, the medical service, and the reindeer industry under separate supervision. Hitherto for administrative purposes all the services have been merged under the educational work. If the entire reindeer industry could be placed under expert direction, with an able physician at the head of the medical service and the schools under the administration of the superintendent for education, better results would probably be secured in all three branches of the bureau's activities. The three branches of the work would still function as a Bureau of Education activity unless it might prove feasible to transfer the medical work to the United States Public Health Service. I recommend that consideration be given to such a transfer.

(3) The Washington office of the Bureau of Education is direly in need of more adequate funds for printing purposes. Under the act of its creation the Bureau of Education is primarily an agency of investigation and dissemination of educational information. The usefulness of the bureau therefore depends in a large measure on the possibility of making its studies available through printing. Printing is essentially the principal avenue through which the bureau must diffuse information. Without distribution of printed documents, the influence of the specialists employed by the Bureau of Education is confined to personal conferences and correspondence, which are necessarily limited as compared with the contacts made through publication. Inadequate appropriations for printing mean an indirect abolition of the purpose for which the bureau was created.

In recent years the cost of printing has doubled. The average cost per page per thousand copies of bulletins printed for this bureau in 1918 was 90 cents; like cost in 1920 was $1.23; and in 1926 it was $1.84, slightly more than double the cost of 1918. Consequently the allotment of $42,500 for printing during the coming fiscal year means little more than $20,000 some eight or nine years ago. In this connection it should be remembered that the staff of the Bureau of Education is being gradually increased and the output of the specialists is considerably larger than was the case previously.

It is worth while to note that in 1925, the last year for which figures are available, the sales of publications of the Bureau of Education through the Superintendent of Documents amounted to $26,726.87, as against a total amount of $20,781 in 1924. The total sales by the Superintendent of Documents of all publications of the Department of the Interior in 1925 amounted to $40,441.94. The sales of this bureau's publications amounted to $26,726.87, or nearly 66 per cent of the total sales of the publications of the Department of the Interior through the Superintendent of Documents.

The increase of receipts from the sale of publications and maps for the various bureaus of the Department of the Interior for 1925 over

the preceding year amounted to $7,210. The increase in sales for the Bureau of Education alone amounted to approximately $6,000, which is abount 83 per cent of the total increase.

May I take this opportunity to again express my sincere appreciation of the continued confidence and steadfast support of the Secretary of the Interior in the work of the bureau.

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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U. S. DEPARTMENT OF THE INTERIOR

REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR THE

YEAR ENDED JUNE 30

1928

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON
1928

THE BUREAU OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIAM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D., LL. D.
July 1, 1906, to June 30, 1911

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to August 31, 1928

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REPORT OF THE COMMISSIONER OF EDUCATION

SIR: I have the honor to submit the following report of recent events in public education of the United States, and summary of the operations of the Bureau of Education for the fiscal year ended June 30, 1928, together with recommendations for the extension and improvement of its work, as required by act of Congress approved March 2, 1867.

PRELIMINARY STATEMENT

Two years ago I inaugurated a practice of giving a brief outline of important movements in the field of public education during the year under consideration, in connection with my annual report concerning the activities of the bureau. I shall do the same in the present report. The Bureau of Education is the only agency in the country which gathers complete data and information on a national scale. Therefore, it would seem appropriate that a short analysis of the present condition of American education should be here presented. In my last report I spoke of the hope that the statistical service of the Bureau of Education might be made more adequate. I am glad to say that this aspiration has been partially realized. In the near future there is every likelihood that statistics of the bureau will be still more complete, accurate, and recent. During the past fiscal year, for the first time in the history of the bureau, so far as I know, most of its statistics were available in the year following collection; that is to say, figures for 1926 were practically all available in 1927.

The State educational officers have become very much interested in the improvement of educational statistics, and largely for this reason have voted to hold a meeting in Washington next December, with the Commissioner of Education. They have asked me to prepare the preliminary data for this meeting, and have indicated that one of its chief objectives should be further improvement of our statistical service. This meeting, which the State educational officers have called of their own initiative, is one of the evidences of the closer cooperation which is coming to the Bureau of Education with educational leaders throughout the country. It argues well for the bureau, and particularly for larger service to the schools of the country.

The functions and organization of the Bureau of Education have been discussed in past annual reports. As these have continued without change during the year no statement with reference to them need be repeated in this report. The policy adopted in my last report of presenting the work of the bureau in topical outline, rather than in details of divisional activities, will be followed.

Summarizing all types of field service during the fiscal year, 22 members of the bureau staff, exclusive of the commissioner, rendered an aggregate of 536 days of field service, outside of the District of Columbia, in 32 different States, Canada, and Cuba. Seven members of the staff, exclusive of the commissioner, delivered 156 addresses in 27 different States, the District of Columbia, Canada, and Cuba, to audiences aggregating 40,530 persons. Forty-nine members of the land-grant college survey staff rendered an aggregate of 740 days of field service in 48 different States.

I. REVIEW OF RECENT EVENTS IN PUBLIC EDUCATION

STATISTICS OF EDUCATION

During the fiscal year bulletins were distributed by the bureau which contain statistics for 1926, showing the activities of public elementary and secondary schools; private elementary and secondary schools, city school systems; public high schools; private high schools; teacher-training institutions; colleges, universities, and professional schools; and a summary of statistics concerning all types of schools. Data were collected and compiled for 1927, showing activities in nurse-training schools; schools and classes for the blind; schools and classes for the deaf; industrial schools for delinquents; and schools and classes for the feeble-minded and subnormal. The collection of statistics for 1928 was begun.

Data collected for 1926 show 20,984,002 pupils enrolled in public and 2,143,100 in private elementary schools, including kindergartens; 3,786,071 in public and 346,054 in private secondary schools; 252,907 in public and 17,209 in private teacher-training institutions; and 280,437 in public and 486,704 in private colleges and universities, excluding preparatory students. The total number of teachers employed in all types of schools is 977,291. The total cost of maintaining and operating these schools is reported as $2,744,979,689; and the total value of school property is $8,125,085,472, which amount includes endowments valued at $1,061,589,042.

The nurse-training schools had 77,768 students in 1927, schools for the blind 6,084, schools for the deaf 84,844, industrial schools for delinquents 84,317, and schools for the feeble-minded and subnormal 104,021.

The total cost of public elementary and high schools in 1903 was $251,457,625; by 1913 this amount had doubled, being $521,546,375; by 1920 it had doubled again, $1,036,151,209; and in 1926 again doubled to $2,026,308,190. This doubling process promises not to continue indefinitely, since the increase in expenditures has been slowing down during the past two or three years. The cost per pupil in average daily attendance was $95.17 in 1924, $98.45 in 1925, and

$102.05 in 1926. Expenditures per capita of population for these years are $16.25, $17.15, and $17.50.

One factor that affects per capita costs is the change that takes place in the percentage distribution of the age groups in the whole population. Previous to 1890 more than 30 per cent of the population was in the 5 to 17 age group. To-day this group comprises about 25 per cent of the whole population. This means an increasing proportion of adults to support schools. Reduction in the birth rate, and life extension assist in bringing about these changes. In the registration area the birth rate has decreased from 25.1 per thousand in 1915 to 20.4 in 1927. This decrease is beginning to affect the increase in enrollments in the lower grades. Slower growth and a smaller proportion of school children will in time affect school costs. While the general population has increased 87 per cent since 1890, the school population has increased only 62 per cent.

A study was completed concerning the teaching load in typical elementary schools in 79 cities. The replies of 4,000 teachers were tabulated. This study attempts to determine the length of the work day of the teacher, her load as measured in pupil hours, the time allotment of each subject, her time spent in community interests, the academic and the professional training of teachers, the length of her experience, her average annual salary, and the amounts earned outside of regular school hours.

Final reports were received from the committees that were cooperating with the bureau in the revision of a bulletin on uniform records and reports. The material has been edited, prepared as a bulletin, and is now ready for the printer.

A list of accredited high schools has been prepared, and the material is now about ready for the printer. All statistics having to do with negro education have been collected into one bulletin and the material is now in press. A bulletin on the money value of education to the individual has been prepared, and is ready for the printer. A study of acceleration and retardation among 150,000 public elementary school children was undertaken during the year, and the final tabulations are now about completed.

HIGHER EDUCATION

Four matters in the field of higher education seem worthy of comment, although they have not received so much attention in the public prints as have other events and problems.

A recent decision of the courts of Minnesota has helped to clarify the relationship between legislative authority and the governing bodies directly responsible for the administration of State educational institutions. The State Legislature of Minnesota set up a commission of administration and finance, which, in accordance with the law,

exercised powers of control over university finances. This control, if carried to the logical conclusion, would have profoundly modified the educational program of the institution. Since the University of Minnesota is a constitutional body and the powers of the board of regents are defined by the constitution, the act of the legislature in setting up an agency which in effect nullified the rights and powers thus granted was declared unconstitutional. The decision does not prevent proper legislative or State control over public institutions, but insures a professional rather than political development of the educational policies of the university.

The survey of a selected group of college libraries, undertaken under the auspices of the Carnegie Corporation, is important in that it indicates an awakened consciousness of the supreme value of the library in modern methods of college instruction. The report is especially significant with respect to the facts presented concerning the necessary dependence of graduate work upon library resources. Institutional specialization and cooperation in the field of graduate and research work would seem to be made necessary by the very physical limitation of library resources in advanced fields.

The whole problem of graduate work has, during the year, been the subject of much discussion that is, as yet, in a somewhat chaotic state. The administrative organization for graduate schools is being developed satisfactorily; the objectives and limitations of graduate work are not very clearly defined. Since graduate work is so closely related to research, recent tendencies to segregate research work from the standpoint of personnel, finances, and administration are especially significant. Indications in the development of both research and graduate work point to constructive programs which will be revolutionary, in that they will probably substitute orderly procedure for mere ambition to develop.

Little public attention has been given to isolated instances of affiliation of small or junior colleges with larger institutions or with groups of institutions. However, such affiliations have during recent months been effected in sufficiently scattered portions of the United States to indicate that a new method and form of organization is likely to be developed in higher education. In general, it would seem that there is a tendency to set up systems of associated and affiliated institutions for the purpose of perfecting the selective processes of the strongest institutions in the systems, to serve as feeders to advanced work, and to strengthen the faculties and prestige of the weaker elements.

RURAL EDUCATION

Public sentiment has not, for many years at least, been so concerned with the social, economic, and educational conditions of the farm population as in 1928. Attention has thereby been called to the

fact that the educational facilities provided for rural children are generally inferior in quality and scope to those offered in cities, and that not the least important of remediable conditions calling for reform in rural communities are those concerned with supplying adequate educational facilities, elementary and secondary. These facilities apply not only to children, but to adults as well. If our farm population is not satisfactorily solving its economic problems, may not the lack of educational facilities be accountable, in part at least, for the condition? Can increasingly complex problems affecting rural life—social, economic, and recreational—be intelligently solved now or in the future if we continue to be content with a type of education for rural children inferior to that offered urban children in the United States? These and similar considerations have resulted in a demand for equalization of educational opportunity that is more insistent throughout the country than ever before, and definite plans are being formulated on a large scale to effect improvement in the present situation. An outstanding evidence of progress in this direction is the fact that about three-fourths of the States have now established and maintain some type of State equalizing fund, based on the principle that the wealth of the State should be used for the education of the children of the State regardless of their living place, whether on the isolated farms or in the crowded city districts. About one-third of the States in this group have adopted their present equalization plan during the past two years.

Characteristic of progress in rural education during the year is the continued emphasis on scientific study of the state-wide educational situation as a basis for formulating an intelligent plan for the distribution of State funds. During the year several States have inaugurated investigations, results of which will be presented before the coming legislative sessions in the hope of securing intelligent revision of existing methods of school support. New York, Alabama, Arkansas, Pennsylvania, Florida, and Virginia are among the States in which additional State funds have been granted, or changes in the methods of distribution have been made, or contemplated plans have received study and attention during the year.

Newer sources of revenue to relieve the overburdened property taxation as the sole source of school support continue to elicit favorable consideration among States considering the revision of taxing methods. The tobacco tax, which has recently been adopted in four States, is apparently proving satisfactory. It and other types of sales tax are being considered favorably by other States. It seems probable that the next few years will bring substantial changes in sources of revenue utilized for school support.

Arkansas has followed the example set several years ago by North Carolina of establishing by State bond issue a "revolving" or build-

ing fund. This money is lent to districts, generally small rural districts, to assist them in securing suitable school buildings. In some other States in which State aid for buildings is provided some increases in the State funds have been secured during the year. New or enlarged school building services have been set up in a few State departments. Progress in securing better rural school buildings has been accelerated also by school consolidation and by the availability of more definite professional and technical help from State and county school departments.

Efforts toward improvement of the quality of instruction offered in rural schools continue to receive concentrated attention from State and county departments of education. In three States a minimum standard for the lowest grade of teaching certificates of completion of two years of professional work in addition to high-school graduation became effective in the fall of 1927. In at least six States the standard of one year beyond high school became effective, while in several other States improved standards of varying kinds or in varying degrees were effected. Teachers in service and candidates preparing to teach in rural schools have attended professional schools in large numbers during regular and summer sessions held during the year.

The movement for improving preservice and inservice training of teachers for rural schools has received considerable impetus during the past year. The need for coordinating the various functions concerned with teaching service has been pointed out in several recent studies, notably those made in Ohio, North Carolina, and Pennsylvania. These studies show that the lack of coordination among the various functions indicated results in chaos in the teaching situation. Certification requirements and regulations are not coordinated with courses offered in teacher-preparing institutions. There is a lack of harmony between preservice and inservice training provided. Teachers trained for one type of work are employed to do an entirely different type. There is little knowledge of the number of annual replacements for which teachers should be trained by teacher-preparing institutions; of the types of positions for which special training should be offered; of suitable curricula designed to prepare teachers for specialized fields, and the like. Plans for making careful studies of the whole situation or for coordinating the work of the various agencies concerned are getting under way in a few States. Ohio is an example. A State plan for coordination has been worked out during the year under the direction of the State department of education and is well on the way to fulfillment.

In the meantime the number of State teacher-preparing institutions in which rural education courses are established is growing and the quality of the training offered improving. At present 152 of the

185 public normal schools and teachers colleges offer some courses in rural education. There is improvement particularly in entrance requirements, quality of courses offered, and in the opportunities furnished for observation and practice work under rural school conditions. During the year at least six institutions have either established or enlarged and improved departments or divisions of rural education previously established as a regular part of the work offered.

Although the latest available statistics show a larger increase in the number of pupils enrolled in small high schools than ever before, these increases are as yet not keeping pace with the increases in enrollments in the urban high schools. Either because of inaccessibility or because of the failure of the objectives, materials, or methods of instruction now obtaining in these high schools to meet satisfactorily the needs of rural life, these schools are reaching a relatively small proportion of the rural children. Only 25.7 per cent of the children, 15 to 18 years of age, dwelling in rural communities are enrolled in rural high schools; whereas 71.1 per cent of the children of the same age group in urban communities are found in urban high schools. Thus nearly three times as large a proportion of city children go to high school as rural children. Rural dwellers can not hope to compete advantageously with urban dwellers so long as their educational equipment is so generally inferior.

Data compiled during the year show also that rural children who are enrolled in high schools have a much shorter school term than urban children. Ten and nine-tenths per cent of these children attend schools which are in session less than 160 days a year; 76.4 per cent in schools which are open 161–180 days; and only 12.7 per cent in schools open 181 days or more. In the case of urban children, by comparison, 59.4 per cent attend schools in session more than 181 days per year and only 0.3 of 1 per cent in schools open less than 160 days. These differences in the length of the school term for the four years of the high-school period become a significant measure of the more limited high-school opportunities of the rural child.

Another important fact revealed during the year is the failure of the rural high-school curriculum to fit the needs of the rural child. The great majority of rural children are limited in their high-school education to a college preparatory curriculum. Statistics show, however, that only about 20 per cent of the children attending rural high schools go to college. This is a problem of curriculum maladjustment greatly in need of study and improvement.

The junior high school as the immediate unit of centralization, and the senior high school and junior college as a second or third unit are showing growth. The junior high school reorganization as such has not, however, made the rapid progress in rural communities that the advantages offered by it seemed to promise. Thus far only 12 per

cent of the rural high schools have reorganized upon this basis, whereas 47.2 per cent of the urban high-school systems have organized on the junior high school plan.

The consolidation movement in rural schools progressed normally during the year. It is estimated that there were more than 3,000,000 children enrolled in approximately 17,000 consolidated schools in the United States during the school year 1927–28. These statistics do not include many rural high schools which transport pupils, and are, therefore, essentially of the consolidated type.

New causes are constantly appearing which affect consolidation. The junior high school organization involving the advantages of departmentalized instruction is receiving special attention in several States, notably New York and California. In many communities this type of organization brings another year of education within the reach of the children of the local consolidated district; it also tends to improve instruction, to enrich the school program, and enrolls larger proportions of rural children in school.

During the year the Supreme Court of the State of Arkansas rendered a decision of considerable importance, upholding the right of county boards of education to join districts in their respective counties. In Texas 20 counties have availed themselves of a recent law providing State funds for rural high school districts formed by county boards of education under stated conditions. In Alabama a special law enacted during the year consolidated the city and county of Montgomery into one school administrative unit.

Economic conditions in rural areas have not been favorable to increases in the number of supervisors employed in the rural schools. Significant progress in this field in organization and technique is, however, reported. County and other rural superintendents are coming more and more to appreciate the real possibilities of their supervisory functions. They no longer act solely as inspectors, critics, or visitors. Supervisors who are technically trained specialists make scientific analyses of the conditions and problems of the rural schools, and of the needs of the rural teachers, and, with the best available facts at hand, give constructive help of a high professional quality.

An examination of problems discussed by conferences of rural supervisors held during the year indicates that they are attacking such problems as: Teacher attitude and cooperation; improvable factors in teaching skill; teacher failures, their causes and prevention; in-service growth of teachers and principals; the discovery, enumeration, and education of exceptional children; the measuring of pupil progress and achievements; and the development of ways and means of providing for very young and over-age pupils. The significant point is that this work is in an increasing degree based on careful and scientific investigation.

The meager facilities for high-grade reading material in rural schools and communities are being improved through State and county libraries. In 14 States the State library is either a definite part of the State department of public instruction or it is closely affiliated with it. These States are Arkansas, California, Connecticut, Idaho, Maryland, Massachusetts, Minnesota, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Vermont, and Utah. According to to the American Library Association the number of county libraries has increased during the past year from 223 to 260. Some of the States in which new county libraries were established during the year are Indiana, Kentucky, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Texas, Mississippi, and West Virginia.

Progressive tendencies are evident in the State courses of study which have been published during the past year, the most significant of which are (1) the attempt to organize the content of the curriculum around children's needs and activities rather than the adopted textbooks or the traditional subjects; and (2) distribution, by officials in charge, of the work of curriculum construction among representatives of the various educational agencies in the State. Curriculum committees have been composed of specialists in subject matter and in education, of supervisory officials, and, in a few instances, of classroom teachers. Illustrative of the newer tendencies are State courses of study published by West Virginia and Iowa and the work now in progress by state-wide committees in North Dakota and California. In Massachusetts a special course for retarded children was prepared during the year by the State department of education.

CITY SCHOOL SYSTEMS

A few years ago a movement to revise both the elementary and the secondary school curriculums was started. This movement has gained momentum until practically every large city school system and many of the smaller ones are now working on some or all phases of curriculum reorganization. Although great progress has been made in this direction, much more remains to be done. In fact, the curriculum should be in process of revision all the time, and not every 10 or 15 years, so that it may be continually changing to meet the needs of an ever-changing civilization.

Great emphasis is being placed upon civics instruction, especially upon civics as directly related to the child's immediate environment. In many schools a study of the city is made by the children in the lower elementary grades. The National Constitution and the problems in a democracy are being given a prominent place in the secondary-school program.

Character education is receiving much attention, either by direct or by indirect instruction. Some cities have prepared suggested

courses of study and reports upon the subject. For example, the Head Masters' Association of the Boston Public Schools has issued a report on character education in secondary schools, which outlines the aims and objectives in character education and which shows how these aims and objectives may be realized through the school organization. A committee of teachers of Fort Wayne, Ind., has prepared a syllabus for character education in the public schools of that city, the outline being chiefly for use in the elementary school.

The effort, begun several years ago, toward the coordination of the work of the kindergarten and the elementary school continues by the preparation of kindergarten-primary courses of study, by placing the kindergarten and primary grades under the same supervisor, by requiring that new kindergarten teachers be trained in primary-grade methods, and by requiring that primary teachers be trained in kindergarten methods. At a conference of kindergarten and grade supervisors, called by the Commissioner of Education last February, it was the general expression that the work of the kindergarten and the primary grades should be unified through supervision.

That the city schools of the country are attempting to improve the quality of instruction in the elementary schools and to make these schools stand out as prominently as any other unit of the system is evidenced by the fact that the educational and professional standards for elementary-school teachers are being raised in some cities from two to three or even four years of normal-school training. Tulsa, Okla., for instance, is now requiring a bachelor's degree of elementary-school teachers. City normal schools are extending their courses. As an example the normal schools in Washington, D. C., have been added to the list of those which have extended their courses from two to three years. In several States the normal-school courses have extended to three or four years, thus making it possible for the cities in these States to obtain better-trained teachers for their elementary schools.

There is also a tendency to demand increased professional preparation on the part of high-school teachers, and to stimulate those already in service to pursue professional courses. The movement in the direction of requiring a master's degree for academic high-school teachers is also pronounced in many cities.

One of the outstanding movements is the effort to improve the elementary schools through the elementary-school principal. Until rather recently the elementary-school principal was often considered as the managing or clerical head of his school, but now he is being recognized in many school systems as the professional as well as the managing head who is held responsible for results in his school.

The work of the elementary schools, especially of the primary grades, will no doubt be improved as a result of the recent move-

ment to study scientifically children of preschool age and to instruct parents regarding the training of children. Interest in this matter is shown by the increased number of child-study classes, enrollments in university extension courses for parents, demands for reading matter on the care of children, and by the number of national, State, and local conferences on modern parenthood participated in by both teachers and parents. In the elementary-school unit at least eight city-school systems are housing or fully supporting nursery schools.

Possibly no movement in education is being so carefully developed under the guidance of research workers as is the movement to study the preschool child. Child-research centers, supported by private or public funds, have been established in several cities and in some universities. The results obtained from the child-research studies, it is thought, will lead to a better understanding of the emotional nature not only of the preschool child, but of children in the kindergarten and the elementary-school grades as well.

That children should be trained in certain behavior habits, and that their emotional as well as their intellectual nature should be developed, is being recognized as never before. The superintendent of schools of Boston, Mass., for instance, recently appointed a council of teachers to make a report to him on the educability of the emotions. The immediate concern of the council, according to the report, was not with the appreciation of lessons in art, music, and literature nor with the sentiments, but with the urges below the child's mental and physical activities.

One of the significant movements in education during the past few years has been the rapid growth of the platoon or work-study-play plan of school organization in the cities of the country. In 1922, only 33 cities had platoon schools, while in 1928 there are 146 cities in 38 States which have one or more of their schools organized upon the plan, or an increase at the rate of 18 cities a year. Recent reports show that there are over 800 platoon schools in these cities.

Not only is the number of platoon schools increasing, but a nation-wide study of platoon schools just completed by the bureau reveals the fact that the curricular content of these schools is being enriched, and that many new and interesting developments are taking place. For example, not only are elementary schools being organized on the platoon plan, but the plan is being adapted to junior and senior high schools. At least nine cities now have either junior or senior high schools operating on the plan.

Another development is the adaptation of the Dalton plan to platoon schools. Experiments in this method of teaching are being carried on in several platoon schools; for example, in the Canton School, Baltimore, Md., the nature study, geography, and history

work in the sixth and seventh grades is being carried on by the Dalton plan, and a very complete record of the results is kept by the teachers.

The use of the auditorium in platoon schools by different groups every period of the day is now well established in this type of school organization. Those engaged in platoon school work contend that the auditorium is one of the most important features of the school, and that some of its values are that it educates children in the desirable use of their leisure time, and serves as a correlating and integrating center for the whole school. It is certainly a new development in the elementary school which is worthy of study, if only as a rather significant experiment in attempting to solve one of the most important problems of our city civilization, i. e., training for leisure-time activities.

The growth of secondary education, which has been one of the outstanding developments in recent years, continues at almost undiminished rate. At the present time more than one-half of the population of high-school age is in actual high-school attendance. The figures for urban as distinct from rural enrollments reveal greater opportunities of high-school attendance offered to city than to rural youth. It is better than an even chance that the city boy of 14 to 17 is in high school; by contrast the probabilities were 7 to 1 against his father having opportunities for a high-school education in 1900.

High-school enrollments have more than doubled since 1920. The extension of secondary education to include in its junior high school some of the grades formerly assigned to elementary schools accounts in some measure for this growth. The larger city school systems are expeditiously placing more and more of their pupils into junior high schools, while the smaller systems are less rapidly but quite consistently also adopting the junior high-school organization. In cities of over 10,000 population between 75,000 and 100,000 pupils are being transferred from elementary schools into junior high schools every year.

Secondary education in some cities is also reaching upward beyond its traditional limit. While the publicly supported junior college is a rather recent development, nevertheless it is beginning to take definite form. The private junior colleges still outnumber the public institutions of this type, but the latter are being organized at a more rapid rate. There are at the present time over 100 junior colleges operated as parts of local school systems. Their number has doubled in the past five years and their enrollments have tripled within the same period of time. The greatest development has taken place in the cities of the West and South, especially in the States of California, Iowa, Texas, Kansas, Michigan, and Minnesota.

Secondary education is becoming exceedingly involved, due to increased enrollments, a multiplicity of types of schools, varied needs and interests of pupils, and the general complexity of demands placed upon the high school by the present-day social order.

Not many years ago our educational system included three units, namely, elementary school, high school, and college. At present there are at least five distinct levels: Elementary school (including kindergarten), junior high school, senior high school, junior college, and college or university (including the professional school). On the secondary-education level the bureau has record of more than 30 different organization types of junior, senior, and junior-senior high schools. If classification is made on the basis of function as well as organization the number of types becomes much more numerous.

In the halcyon days of elementary-high school-college education, we operated on a single-track system which oddly enough provided no stopping facilities for anybody except at the terminus; if a passenger wished to get anywhere he had to agree to take a long trip and to stay with the train. At present our large city secondary schools provide accommodations for all, even for those who do not want to ride. After a certain minimum length of the journey is completed we are called upon to make local stops all along the line for those who wish to go no farther, to furnish express services for those who go to the end of the division, and to supply a limited extra-fast service to those who go to the end of the line and are intent upon making connections at that point.

Each of the units in secondary education is called upon to meet the problems of the pupils who drop out before completion of the course, those who complete but go no farther, and those who complete and wish to continue. This situation involves the solution of problems within each unit, the relationship between the various units, and the articulation with the elementary school at the beginning and with the college at the end of the secondary school period. Through exploratory courses, pupil guidance, special vocational schools, comprehensive high schools, programs for curricular reorganization, and the like, city school systems are at work upon these problems. The whole field of secondary education is, however, greatly in need of coordinated study in order that proper balances may be established in expenditures, administration, and instruction.

PHYSICAL EDUCATION AND SCHOOL HYGIENE

The New York State Commission on Ventilation, in a preliminary report of investigation made in the schools of Syracuse, states that respiratory diseases were much more frequent in children attending

recently constructed schools with forced draft than in old schools in which heat and gravity were the principal factors in air exchange. Following rainy weather there was a striking increase in such diseases in the former schools, due apparently to the more rapid evaporation from wet clothing produced by the greater air motion and consequent chilling of the children. Similar studies in one and two room rural schools of Cattaraugus County, N. Y., confirm previous findings of the commission that "rooms with moderate temperature show lower rates of respiratory illness than do those which are overheated or underheated."

There has been much interest in the possibilities of the use in schools of window glass more permeable to ultraviolet rays than ordinary glass. However, according to Tisdale and Brown, indirect sunlight (sky shine) in the latitude of Toronto passing through special glass is slight or negligible in antirachitic effect, except in the immediate neighborhood of the window, and Doctors Goodman and Green, working in New York City, find that "during the winter months, under the most favorable conditions, very little of the health-giving ultraviolet of the sun can enter even through an open wndow. When the window is protected by a glass substitute, the am unt of ultraviolet entering is still further decreased by the lowered transmission of the glass. Whether by using such a glass substitute sufficient ultraviolet can be introduced to a room during the winter months to be of value as an aid to health, is, in view of present evidence, very doubtful."

Three States—Delaware, Florida, and Ohio—have been added to the list of those having State directors of health and physical education, and a physical education law was passed by Arizona.

A study by Westenberger of the influence of physical defects upon intelligence and school achievement adds another to the investigations which find that this effect is only evident when the defects are serious or of a certain type. The influence of lesser defects is present, but does not show itself in tests which represent only mental work at average school pressure.

An investigation carried out in the dental college of the University of California emphasizes again the importance of the proper feeding of the child, from conception, if he is to have sound teeth. This study suggests that heredity is not so strong a factor in the condition of the teeth as is usually supposed, and that improvement of the diet at school age helps in the prevention of caries.

Investigations by Dean Ruediger and others show anew the neglect of the teaching of physiology and hygiene in secondary schools and in colleges.

A survey recently made jointly by the United States Public Health Service and the Bureau of Education with regard to sex education in high schools shows that there has been a steady increase in the schools giving instruction in this subject. The tendency has been to make it a part of more general courses, such as biology or physiology, and to give less emphasis to disease, and more to the normal personal and social aspects of the subject.

The committee on health and physical education in junior and senior high schools made its report to the department of superintendence, and this was published in the sixth yearbook of the department. It outlines in considerable detail health and physical education programs for junior and senior high schools.

There has been not only complaint of the mismanagement of athletics in high schools and colleges, but efforts are being made to improve present conditions, notably by the State Department of Education of New York.

ADULT EDUCATION

Perhaps the most potent event in the field of adult education during the year has been the publication by Doctor Thorndike and other psychologists, of research studies which show that adults retain their learning ability. Although it was well known that many adults did retain their learning ability, these cases were considered by many people as being exceptional.

There has been a decided growth in the general belief that the average individual retains his ability to learn adequately long after middle age. This is a matter of great significance and is creating a demand that educational programs which have been constructed on the theory hitherto generally accepted, that learning ability for the average individual ceases at maturity, be reorganized. Education is rapidly becoming more vital, and more a part of everyday life, and, as it explains life at every stage of development, it is a continuous process.

It is now becoming evident that public opinion will not long permit millions of our people between the ages of 15 and 50 to remain functionally illiterate for the lack of educational opportunities. This adult illiteracy is not in keeping with our form of government nor with the principles of economy. The offering of elementary educational opportunity to adults pays large returns in the form of increased earnings to the individuals taught and to the people as a whole by the rise of the general welfare.

The theory formerly held by some that fixed habits of adults would prevent them from attending classes even if they had the opportunity to do so is clearly refuted by the large evening-school attendance in

Gary, Ind., Ithaca and Buffalo, N. Y., St. Louis, Mo., Los Angeles, Calif., Johnstown, Pa., Buncombe County, N. C., the rural schools of southern Delaware, and in other places. It has become clearly evident that a certain amount of education is necessary if men and women are to adjust themselves to the ever-changing industrial conditions caused by the introduction of new machinery and the new organization of industry. Those who are studying nonemployment problems hold that education is the best rehabilitating agent to prevent men and women from being thrown out of employment.

The public agency for the formal education of adults is evening and late afternoon schools. There has been shown more interest in evening schools in the past year than during the previous year.

Informal adult education has made notable progress during the year as is seen in the report of the American Library Association, in attendance at museums, and by the increased number of reading and study clubs that have been organized.

Educators are discovering that adults exert the strongest influence in the lives of children, hence the education of parents and other adults is being considered as very important in any program of education.

Parental education throughout the United States during the past year has been characterized by the growing interest of parents in problems that arise in rearing their children and by the tendency toward better cooperation and coordination of existing agencies engaged in one phase or another of parental education; the establishment of more centers for research in child development and parental education in institutions of learning, such as the Ohio State University and the New York State Department of Education; the development of nursery schools in connection with research centers for child welfare and home economics departments of colleges and universities from which parents receive advice and instruction; contributions to research studies made by the publication of child development abstracts, bibliographies, and other publications of the National Research Council; the publication of reliable data developed in other centers of research in child development; and a marked increase in the publication of books by experts on the problems of child development written for the layman in nontechnical language.

Many of the centers for research work in child development and parental education in progress have been made possible through grants by foundations which have also granted funds to several organizations for the promotion of parental education. Among these organizations are the American Association of University Women, whose educational program includes the study of preschool education, the organization of study groups among college-trained mothers, and the publication of materials for organizing and con-

ducting this work; the American Home Economics Association, whose work in child development includes, among other things, the maintenance of a consultant field service, the study of materials available on the subject of child care, and parent education; the Child Study Association of America, located in New York City, which carries on training courses for leaders in parental education, organizes study groups, institutes, and conferences for parents in New York City and in various other cities, and issues publications in connection with its endeavors.

The National Congress of Parents and Teachers, through its national, State, and local bureaus, committees, reading and study groups, works for an educated parenthood and aids individual members in the discovery of educational material which has been made available by experts. This organization conducts annually a nation-wide summer round-up of children which is a campaign to have pre-school children examined by experts and to have their remediable physical defects corrected during the summer preceding their first entrance into school. Many Federal and national agencies, educational, medical, and social, have cooperated in this campaign. The instruction of parents in the physical care of their children might be called one of the by-products of this round-up. The National Congress of Parents and Teachers has conducted courses on the "educational aspects of the parent-teacher movement" in many colleges and universities and institutes at normal schools.

Local groups in large cities, such as the Parents' Council of Philadelphia, which during the past year met periodically in many child-study groups for lectures or instruction, and the United Parents' Association of New York City, whose unique feature for the past year was the parents' exposition in New York City, are conducting programs for the education of parents.

An outstanding example of cooperation and coordination is to be found in California, where a state-wide project in parental education has been in progress for a year. The State department of education, the State university, the parent-teacher associations, the department of health, and the county library cooperate for the success of this work under the combined administration of the State department of education and the State university.

INDUSTRIAL EDUCATION

There has been marked progress in the field of industrial education during the past year. An increased interest has been manifested on the part of school superintendents in all phases of the work; industrial companies have been active in their support of plans for cooperating with the public schools in offering training to employed people; and enrollments in general have materially increased, especially in the all-day and part-time classes.

During the year there was a growing recognition of the fact that efficient work can not be carried on without adequate shop rooms and equipment. The housing facilities for shop work and other industrial courses have been improved in many places. New vocational buildings and technical high-school buildings have been erected, additions have been made to present vocational building, and shops have been included in the plans for new high-school buildings. In some sections of the country new gymnasium buildings have included shop rooms in their plans, and have found them satisfactory in operation.

Increased emphasis has been placed upon the values to be derived from the exploratory and developmental types of experiences for the industrial-arts work in the junior high school. A study of the courses offered by various schools, their statement of aims, and their list of projects, together with the discussions of these subjects by teachers' organizations, all point toward a rather general acceptance of these values as the chief objectives for industrial-arts work in the junior-high-school grades. More frequently than in previous years is this work regarded as a part of the general educational program and not a phase of a special type of education. This is as it should be, as it is in keeping with the generally recognized aims of the junior high school.

The past year has also witnessed a considerable increase in the number of local organizations of industrial teachers and a pronounced activity on the part of these organizations directed toward the improvement and promotion of all types of industrial education. These organizations are rendering great service by emphasizing the values of vocational-industrial and industrial-arts courses in the school systems which they serve and by their constructive criticisms of the organization of the courses, methods of teaching, and standards of pupil attainments. The American Vocational Association organized an industrial-arts section which held its first meeting as a part of the program of the annual convention of this association in December, 1927. This association during the past year appointed a committee to make a study of standards for industrial-arts work.

HOME ECONOMICS EDUCATION

Among the significant achievements during the past year in public-school home economics are: Universal home economics curriculum building conforming to the life needs of the girls, in the elementary, junior, and senior high school; the development of courses on the economic and social relationships of the family; extension of home economics for boys; expansion of child development and parental education courses; the increase in the number of nursery schools, day nurseries, and research centers for the observation and study of pre-school children; formation of the Organization of Supervisors and

Teachers of Home Economics, which convened for the first time just preceding the meeting of the Department of Superintendence in Boston, Mass., February 24 and 25, 1928; recognition by school authorities that the school lunch room is an important educational factor of the school system; development of scientific home-economics tests and measurements; studies concerning the gainful occupations open to girls trained in home economics, why girls elect home economics, status of home economics in certain accredited high schools, intelligence quotients of home-economics girls versus those of the girls choosing other academic subjects, grade placement of home-economics subjects, and the administration of home economics in the public schools.

Nine regional cooperative studies concerned with the time allotment and home economics as a required subject in junior high schools, researches on the placement of home economics content in junior and senior high schools, and the administration of home economics in our public-school system, etc., were made by city supervisors of home economics.

COMMERCIAL EDUCATION

The most significant developments in the various levels of commercial education during the past year pertain to research. The research studies were designed to contribute toward a fact basis for the organization of the subject matter and improvement of instruction in the secondary, normal, and collegiate schools. Among the studies reported during the year, the following are outstanding: A comprehensive survey of secondary commercial education in Minnesota; a study of the business biographies of 3,000 graduates from the commercial departments of Iowa high schools; a study of the present status of commercial teacher training; analyses of the work of bookkeepers; studies regarding standards for credit in commercial subjects and standards of achievement among office workers; and the research studies reported by the American Association of Collegiate Schools of Business regarding research in business problems. Occupational and follow-up studies were made at a number of universities in Iowa and in many cities, including the following: Oakland, Calif.; Chicago, Ill.; Pittsburgh, Pa.; Minneapolis, Minn.; St. Louis, Mo.; Dayton, Ohio; and Joliet, Ill.

The organizations of commercial teachers have been important factors in the progress of the past year. In accord with the two previous programs of the Iowa Research Conference on Commercial Education, the 1928 program was excellent, consisting of reports on the major research studies. The Eastern Commercial Teachers' Association inaugurated a program of issuing yearbooks. The National Commercial Teachers' Federation began the publication of a quarterly

magazine, and the first award of the Willard J. Wheeler prize for the best research in commercial education was made through the federation. Commercial teachers' associations were organized in the State of Ohio; Philadelphia, Pa.; and New York, N. Y. The National Association of Commercial Teacher Training Institutions held its first meeting at Iowa City, Iowa, in March, 1928.

The outstanding events in commercial teacher training were the announcements regarding this subject by the University of Michigan, University of Pennsylvania, and the State departments of education in California and Ohio. Many universities are studying the need for such curricula and have signified their intentions of entering this field.

Much progress has been made regarding many other phases of commercial education, including supervision, improvement of methods of instruction, organization of clerical training, and retail selling courses.

SCHOOL LEGISLATION

During the past year the legislatures of nine States met in regular session, namely, Kentucky, Louisiana, Massachusetts, Mississippi, New Jersey, New York, Rhode Island, South Carolina, and Virginia. Special sessions were held in Iowa and North Dakota, apparently without enacting any educational legislation.

From the reports received by the bureau it appears that the outstanding feature of educational legislation during the year is not its volume or content but rather its method of procedure. A review of the subject indicates a change in the technique of procedure on the part of various representatives of educational interests seeking legislation. Formerly they generally urged their legislative programs separately, manifesting not only divided interests but occasionally opposing programs, either of which tended to impede legislation.

In recent years school officials, educational associations, institutions, and various organizations interested in education have been inclined to harmonize their interests and to unite in their efforts for desired legislation. Moreover, they have endeavored to prepare jointly, through legislative committees, educational programs to be submitted to the legislatures for their approval and support.

This procedure on the part of the various educational groups appears both effective and appropriate. It is the scientific spirit operating in the field of school legislation, working out programs based upon reports of various committees appointed to study in detail the different problems in need of legislation. Such programs are more and more winning legislative favor. Such committees are being looked upon by legislators as a reliable source of information in regard to matters affecting the schools. There can be no doubt that continued development and use of this procedure will eventually tend to produce more

economic, constructive, and effective school laws, and also to prevent enactment of undesirable ones.

The content of school legislation within the past year is similar in general to that of recent years. Kentucky enacted a State teachers' retirement law, and the legislature of Mississippi appointed a commission to study the question of teacher retirement, while New Jersey and New York made slight changes in their retirement laws. Increased compensation for county superintendents was provided for in Mississippi and New Jersey. A law requiring teachers to be citizens of the United States was passed in New Jersey. The most noticeable changes were witnessed in Virginia, where the school law was recodified and constitutional amendments were made. Constitutional amendments provided that the State board of education consist of seven members appointed by the governor, subject to confirmation by the senate; that the State superintendent of public instruction be appointed in the same manner; and that county superintendents be appointed by the county boards of education from an eligible list approved by the State department. Generally speaking, the tendency of recent years to equalize school funds has not abated, and the problem of securing adequate funds for poor districts still confronts legislators and school officials.

LIBRARY ACTIVITIES

Organized cooperative work by American libraries produced noteworthy results during the past year. The Union List of Serials, showing the holdings in these publications of all the principal libraries of the country, was completed, and a new List of Serial Publications of Foreign Governments owned by the same libraries was inaugurated.

The Library of Congress continued to develop a service which has come to be organic in an institutional way. In addition to an enlarged and intensified service to Congress and to the various Government department, it now renders a diversified aid to scholarship and to libraries as such. The library is now empowered by Congress to receive and administer endowments for specific purposes. Funds recently presented to the library have enabled it to establish "chairs" of various subjects. These are not "chairs" in the university sense, but are interpretive chairs, whose incumbents will combine with administrative duties an active aid and counsel to those pursuing research in the library, and general promotion of research within their fields. These "chairs" are designed to supplement in their respective fields the regular services of the bibliographic and reference sections of the library. Chairs in American history and in the fine arts have recently been established. Archer N. Huntington has given the Library of Congress $100,000, the entire income of which is to be applied to the purchase of recent publications in the field of Spanish,

Portuguese, and Spanish-American history, art, and literature. John D. Rockefeller, jr., recently gave the Library permission to draw upon him during a 5-year period to the amount of $450,000 for the acquisition, in reproductions, of source material for American history and of $250,000 for the extension of bibliographic service.

The union card catalogue of the Library of Congress, which is a record of books in other American libraries that may be useful to research, has been revised and enlarged during the past year so that it now numbers some 4,000,000 cards. This is a cooperative undertaking for public service, and is based upon voluntary contributions of information. Henry C. Folger is to erect a new building on a site immediately adjacent to the Library of Congress to house his great collection of Shakespeariana. This will be another addition to the research facilities of the Library of Congress.

Last year $750,000 was expended to construct for the Library of Congress a new bookstack to accommodate a million and a half volumes, with special facilities also for the accommodation of research workers. An additional appropriation was also granted to extend the three upper levels of the new stack, and provision was also made for the acquisition of additional ground on which to erect a building auxiliary to the main library building.

With the direct approval of the Pope, three prominent American librarians have been investigating the resources of the Vatican library at Rome with a view to inaugurating measures to make its collections more serviceable to scholars. The plan is to catalogue the numerous incunabula of the Vatican library, to begin cataloguing the manuscripts, and, perhaps, prepare a catalogue of some special section of the library as a pattern for what may ultimately be a complete catalogue of its books. The plan is reported to be making excellent progress. Several representatives of the Vatican library have visited the United States in order to study American library methods at first hand. The scheme is being financed by the Carnegie Endowment for International Peace.

Education for librarianship continues to make notable advances. The new Graduate Library School of the University of Chicago is just opening, and the School of Library Service of Columbia University is making fine progress. The University of Michigan now has a department of library instruction, and the regents of the University of Minnesota have just authorized the establishment of a division of library instruction. Dr. George Alan Works, dean of the Graduate Library School of the University of Chicago, prepared a notable report on college and university library problems, which was published by the American Library Association during the year.

The American Library Association held its fiftieth annual meeting at West Baden, Ind., May 28 to June 2, 1928. One of the principal

features of the meeting was the presence of a delegation of Mexican librarians, headed by the chief of the library department of the Ministry of Education and by the Director of the National Library. Several members of the delegation made addresses which emphasized the note of cooperation between Mexico and the United States in the matter of library service, including especially international bibliography.

Progress in library architecture was made during the year by the erection of noteworthy buildings, among which were that of the California State Library at Sacramento, and public library buildings for Pasadena, Calif.; Birmingham, Ala., and Queensborough, N. Y. Besides the new edifice of Yale University, work was also under way on new buildings for Dartmouth College; Wesleyan University, Middletown, Conn.; the College of the City of New York; and the University of Washington, at Seattle.

II. WORK OF THE BUREAU OF EDUCATION

A. General

1. RESEARCH

(A) Studies Completed

During the year the following studies by members of the staff of the Bureau of Education were brought to completion:

Higher education.—(1) Statistics of land-grant colleges for the year ending June 30, 1926; (2) report on surveys of higher education for 1922–1926; (3) accredited higher institutions; (4) statistics relating to enrollment in engineering schools for 1926–27 and 1927–28; (5) current statistics relating to enrollment, salaries, budgets, etc., of State universities and colleges; (6) self-help in American colleges; (7) statistics relating to student enrollment in land-grant institutions since 1900; (8) statistics of land-grant colleges for the year ending June 30, 1927; (9) study of science and chemistry in college entrance and graduation requirements; and (10) report on income of land-grant colleges since 1900.

Rural education.—(1) Biennial surveys of rural education (teacher preparation and educational surveys); (2) State normal schools and teachers colleges (for whites) in the United States and other institutions reporting courses in rural education and faculty members responsible for the interests of prospective rural-school teachers; (3) consolidation of schools and transportation of pupils for 1925–26; (4) selected list of recent publications of special value for rural-school supervisors; (5) curricula and differentiated courses for the preparation of rural elementary-school teachers offered by State normal schools and teachers colleges (for whites) in the United States; (6)

annotated list of publications helpful to those interested in planning or improving rural-school buildings; (7) selected bibliography of references to recent publications pertaining to rural-school libraries; (8) list of magazine articles helpful to those engaged in the preparation or supervision of teachers for rural schools; (9) bibliography of recent materials dealing with small high schools; (10) abstracts of proceedings of rural teacher-training conference in Boston, February, 1928; (11) abstracts of addresses delivered at the Northeastern Supervisory Conference, New York, N. Y., April, 1928; (12) educational progress among the mountain whites and educational and road conditions in the southern Mountain States; (13) activities of parent-teacher associations in rural communities; (14) State officials responsible for supervision of rural schools; (15) county (and other rural) superintendents; (16) trends of secondary education in Czechoslovakia; (17) museums as a national asset; (18) curriculum construction under direction of county superintendents; (19) criteria for judging rural-school courses of study; (20) State supervision or promotion of libraries for rural schools; (21) cooperation of county libraries with rural schools; (22) elementary teachers' meetings; (23) abstract of certain statistics given in bureau bulletin, "Statistics of Public High Schools, 1925–26," with special implications for rural high schools; and (24) developments in rural-school supervision.

City schools.—(1) Certain practices in city school administration; (2) review of city school survey reports for 1922–1926; (3) supervision by heads of departments in the larger high schools; (4) an evaluation of the schools of Tomahawk, Wis., and of La Crosse, Wis., from data submitted through the extension division of the University of Wisconsin; (5) standing committees of city boards of education; (6) teachers' salaries in cities having a population of 2,500 and over; (7) twelve articles for the United States Daily on various city school problems; (8) administration and organization of nursery schools in the United States; (9) an analytical study of curricula offered for the preparation of nursery, kindergarten, primary teachers, by teacher-training institutions; (10) a primer of information regarding kindergarten education; (11) growth of kindergarten education in public-school systems in cities having a population of 2,500 and over, analyzed by States and by cities according to population size; (12) annotated list of pamphlets on early childhood education, issued by schools and professional organizations; (13) child study material for parents grouped to help parents guide their children's growth and play activities; (14) publications in the field of kindergarten-primary education—a classified and annotated list of references on the history, current practice, and scientific investigations in kindergarten-primary education; (15) projects and curriculum materials on safety instruction for the elementary schools; (16) source material on different phases of

the platoon plan of school organization; and (17) requirements for high-school graduation in States, cities, and individual schools.

Physical education and school hygiene.—(1) Present status of school health work in the United States; (2) posture of school children; (3) methods of organizing health work in rural schools; (4) administration of physical education in the public schools; (5) professional courses for teachers of physical education; (6) study of State athletic associations for control of high-school interscholastic athletics for boys and for girls.

Adult education.—(1) Opportunities offered for adults to further their education through college and university extension; (2) effective methods of teaching adult alien and adult native illiterates; (3) educational opportunities offered to adults in Denver, Colo.; and (4) charts, showing age, previous occupation, and education of inmates of Oregon State Penitentiary and school subjects wanted by them.

Industrial education.—(1) List of private and endowed schools offering trade and industrial courses, with a short descriptive account of each school; (2) study of the general shop, dealing with organization, courses of study, buildings, and equipment; (3) study of grading the work of pupils in industrial schools and classes; (4) study of the use of tests and measurements in industrial schools; and (5) industrial teacher-training and industrial courses in land-grant colleges.

Home economics education.—(1) Study concerning the election of home economics in senior and regular high schools of representative cities of the United States; and (2) study concerning time allotment and requirements of home economics courses and subjects taught in the junior high schools.

Commercial education.—(1) Need for supervision of commercial education; (2) follow-up and commercial occupation surveys; (3) status and trends of commercial education in junior high schools; (4) city and State standards for credit in shorthand and typewriting; (5) reports on research pertaining to bookkeeping, stenography, and commercial teacher training; (6) commercial teacher training in normal schools and teachers' colleges; (7) collegiate education for foreign trade; (8) evening collegiate courses in business; (9) tests and measurements in commercial education; and (10) private and endowed schools for negroes, offering education and training for business.

School legislation.—(1) Analysis of State laws relating to conpulsory education; (2) statistics showing relation between compulsory education laws and illiteracy of persons 10 to 25 years of age in the United States in 1890 and 1920; (3) digest of legislation for the education of crippled children; (4) legal status and current practice in regard to the Bible in the public schools; (5) digest, by States, of 1927 educational legislation; and (6) digest of State laws relating to the teaching of the effect of alcohol and narcotics.

Foreign education.—(1) Illiteracy in the various countries of the world; (2) major trends in education in foreign countries; and (3) practical program of education for promotion of international good will.

(B) Studies in Progress

Higher education.—(1) Statistics of land-grant colleges for the year ending June 30, 1928; (2) extension work in teachers colleges; and (3) study on fellowships and scholarships.

Rural education.—(1) Achievement of pupils in consolidated and one-room rural schools; (2) plans for the administration of transportation in selected consolidated schools; (3) trends of salaries of teachers in rural schools between the years 1922 and 1926; (4) statistical and analytical study of rural high schools; (5) a curriculum unit based upon plans for a play day; (6) curriculum unit based upon activities intended to stimulate and develop children's interest in nature; and (7) distribution, qualifications, and duties of rural-school supervisors.

City schools.—(1) How the school-building problem is being solved in the United States; (2) the platoon plan in 135 cities in 36 States; (3) individual instruction in platoon schools; (4) the auditorium in platoon schools; (5) types and extent of devices for adapting secondary schools to the individual differences of pupils; (6) the educational value of building blocks in nursery schools, kindergartens, and primary grades; (7) supervision for the kindergarten and primary grades of city-school systems; (8) revision of reading course for parents; (9) chapter on city-school systems, for the biennial survey, 1926–28; (10) progress in schoolhouse construction for the biennium 1926–28; (11) a review of city-school survey reports for 1926–28; (12) progress in nursery, kindergarten, primary education in the United States; (13) progress in secondary education; (14) methods of selecting new teachers in city schools; and (15) a series of lesson projects on the American Indian for use in the elementary school.

Physical education and school hygiene.—(1) Physical defects of school children and what can and should be done about them; (2) sanitation of the schoolroom; (3) open-air schools and their management; (4) physical education as a required subject in teacher-training schools; and (5) best methods of construction for rural schools.

Adult education.—(1) Best methods of reducing illiteracy in the United States, with special attention to means of promoting the organization of evening schools in both city and country districts; (2) various types of part-time education in the United States; (3) contributions of various national organizations toward the reduction of illiteracy in the United States; (4) extension activities in teachers' colleges and normal schools; (5) educational opportunities offered to inmates of prisons in the United States; (6) educational opportunities

offered to adults in rural communities in Delaware; (7) extension activities in land-grant colleges; (8) compaigns to prepare children for their first entrance into school, free from remediable defects; (9) courses in home education for reading or study by individuals or groups.

Industrial education.—(1) Part-time work in industrial education; (2) survey of courses for manual-arts teachers offered in teacher-training institutions; (3) survey of progress in industrial education for the biennium 1926–1928; and (4) list of supplementary reading material for industrial schools and classes.

Home economics education.—(1) Home economics for boys and men; (2) home economics in the one-room rural schools and consolidated rural districts; and (3) nutrition as taught in the public schools of the Nation.

Commercial education.—(1) Part-time commercial education; (2) collegiate education for business; and (3) commercial teacher training and education for business in land-grant colleges.

School legislation.—(1) Review of 1926 and 1927 educational legislation; and (2) legislation for financing education, showing sources of school funds and methods of distribution.

Foreign education.—(1) Ministries of education in foreign countries; (2) bilingual and multilingual school system 5; (3) foreign students in land-grant colleges; and (4) education in Argentina.

2. EDUCATIONAL SURVEYS

Educational surveys constitute an important function of the Bureau of Education. In March, 1927, the bureau undertook a resurvey of negro colleges and universities in the United States. The report has been completed and is now in process of publication. The survey shows the remarkable gains made in the development of institutions of higher learning for negroes in the past 10 years, and the need for even greater development of colleges and universities in order that the needs of the race may be fully met.

The work of the survey of the land-grant colleges was begun in July, 1927, when the funds appropriated by Congress became available. Rapid progress has been made. Large numbers of persons are actively participating in this survey as members of local committees and of the field staff. Many of the questionnaires have been prepared and distributed to the colleges for final filling out. The bureau's field staffs to handle four of the questionnaires have been organized and their members have commenced to make visits to the institutions.

An investigation of possibilities for the establishment of courses in rural education in Miami University, Ohio, was made.

The bureau is cooperating with the Office of Indian Affairs of the Department of the Interior in a survey of Indian educational con-

ditions and revision of the course of study for Indian schools. Several days preliminary field work have been devoted to this endeavor.

The State superintendents of public instruction and commissioners of education during the fiscal year decided to hold a two-day conference in Washington in December, 1928, with the Federal Commissioner of Education. One of the problems which they propose to discuss is the support and financing of schools. In view of the fact that the costs of public schools have more than doubled in the past few years, it seems that such a study would be highly serviceable to the cause of education; measures might be formulated in the interest of economy that would prove most efficacious. This whole field is relatively unexplored. Every conceivable form of taxation is used in the effort to support schools. No one has attempted to show the most satisfactory ways of raising funds for school purposes. A sound and economic program for expenditures is equally as important as a proper system of revenue. These and other studies ought to be made as quickly as funds are available.

3. CONFERENCES

The following conferences were called by the Commissioner of Education:

Conference on rural-teacher preparation, held in Boston, January 25, 1928.

Conference of State and local supervisors of rural schools in the Northeastern States, held in New York City, April 23 and 24, 1928.

Conference on rural-teacher preparation, held in Los Angeles, Calif., June 14–18, 1928.

Conference of kindergarten-elementary grade supervisors in city school systems, held in Boston, January, 1928.

The third national conference of home economics supervisors, which was held in connection with the twenty-first annual meeting of the American Home Economics Association in Des Moines, Iowa, June 25, 1928.

The bureau also cooperated with the National Platoon School Organization in holding a series of committee conferences in Boston during the meeting of the department of superintendence.

4. COOPERATIVE UNDERTAKINGS OTHER THAN CONFERENCES

Cooperation with other organized educational agencies is emphasized by the Bureau of Education. During the fiscal year cooperation was inaugurated with local, State, and national organizations interested in reducing illiteracy. A plan for cooperation between the bureau and the United States Bureau of Naturalization regarding the preparation of aliens for citizenship in the United States was formulated.

Cooperation was effected with the United States Department of Justice in devising an educational program for Federal penal and correctional institutions. During the year this cooperation has included conferences with officials of the Department of Justice in Washington, D. C., and preliminary plans for visits to institutions in the early part of the fiscal year 1928–29.

The bureau cooperated with the American Library Association, the National University Extension Association, and the National Congress of Parents and Teachers, in connection with the national committee on home education, of which the United States Commissioner of Education is chairman. The third meeting of this committee was held on April 6, 1928, at Washington, D. C., at which a general plan of cooperation between these agencies and the Bureau of Education was formulated.

Cooperation with the National Congress of Parents and Teachers in the summer round-up of children was continued during the past year, by urging the increased participation of 19,000 school officials in this campaign to prepare children for entrance into school free from remedial defects.

Cooperation was had with the following committees of the National Education Association: (a) Committee on coordination in adult education; (b) committee interested in posters for use in adult classes; and (c) commission on the articulation of the units of the American school system.

Cooperation was also maintained by the bureau with the Rural Life Bureau of the National Congress of Parents and Teachers, American Vocational Association, Negro Land-Grant College Association, United States Department of Commerce, etc. Cooperation was effected with several city school systems in examination of their home-economic courses of study, with a view to suggesting improvements; and with the Board of Education of Dallas, Tex., in formulating plans for a new technical high school.

The bureau cooperated with the national nursery school committee and with a subcommittee, in developing a tentative list of minimum essentials for nursery-school education, the purpose of which is to show educational objectives underlying this work and to set up standards by which the rapidly increasing number of preschool classes can be grouped as nursery schools, or as informally organized play groups.

During the past year the bureau assisted in establishing the Washington Child Research Center. The bureau representative acted on the housing and teacher appointment committees and was put in charge of the work of reconstructing the building and equipping it for the research center. Cooperation with this center gives the

Bureau of Education an opportunity to study phases of child development and parental education at first hand.

The bureau cooperated with 10 national research committees on the platoon plan. It also cooperated with the District of Columbia Parent-Teacher Association by erecting a school building exhibit of 100 mounts in the main corridor of the Department of the Interior Building; with the department of rural education of the National Education Association, American Country Life Association, Southern Women's Educational Alliance, National Fire Waste Council (agricultural committee); and with the venereal disease division of the Public Health Service in making a survey of the teaching of sex hygiene in high schools.

5. MISCELLANEOUS

The credentials of 307 foreign students from 53 different countries were evaluated.

Translations were made, for the bureau, of educational material from 17 different foreign languages, a total of 50,500 words. In addition, service was rendered to governmental agencies, outside of the bureau, in the translation of material from 17 different foreign languages, a total of 39,360 words.

A member of the bureau staff served as secretary of the commission on education of the World Conference on International Justice, Cleveland, Ohio, May 7–11, 1928.

The bureau was represented at the Fifth Pan-American Child Congress held in Habana in the fall of 1927. Its representative delivered an address before the congress and spoke before three local organizations. An exhibit was prepared by the bureau to show activities in nursery-school, kindergarten, and primary grades.

The following additions were made to the visual material available for distribution: 900 feet of film showing nursery-school activities, a reprint from pictures taken in the Oregon Agricultural College; and 163 colored stereopticon slides of activities in nursery schools, kindergarten, and primary grades.

The bureau collected an art exhibit from several of the city school systems of the country for the executive committee of the Imperial School Children's Association in Japan, to be used in connection with an art exhibit in that country. An exhibit of art by Japanese school children was received and sent to the cities that contributed to the exhibit for Japan.

A directory of 828 supervisors of kindergarten-elementary grades in the city school systems of the country was compiled.

B. Home Education

During the past fiscal year the work of home education has been largely reorganized. Projects to be carried on in home education

include: Studies of various phases of parental education and of movements related to the education of parents in groups or individually; the preparation of materials for the home education of the whole family, such as courses, lists of books, circular letters, bulletins, reports, and other publications in connection with the work; making contacts with individuals, groups, institutions, and agencies for the promotion of home education; a consulting and advisory service for parents, for leaders in the organization of parent groups, and others interested in pursuing their own education at home.

The enrollment and certificate features of the bureau's reading courses were discontinued November 15, 1927. For the 5,997 readers already enrolled for courses the bureau will continue the service for three years following the date of each enrollment up to November 15, 1930. The total enrollment for reading courses since the beginning of this project reaches almost to 30,000 readers. During the past year 402 certificates were issued.

New reading courses have been prepared on home training of children, the whole child, and problems in adolescence for parents. Revisions have been made on the courses: World's great literary bibles; Great literature, ancient, medieval, and modern; Agriculture and country life; Citizenship and government; The preschool child; Forty books for boys and girls. To all of these courses new features have been added.

There are now in process of preparation courses on Transportation, Parent-teacher associations, Art, Nature study, and revisions of other courses.

C. Alaska

The only purely administrative functions of the Bureau of Education are in connection with its work for the benefit of the natives of Alaska. This work comprises the education, medical relief, and the promotion of industries, including the herding of reindeer, of the native Alaskans.

The organization of the Alaska division of the bureau consists of the Washington, D. C., office, with 3 employees; the Seattle, Wash., office, which is the headquarters of the Chief of the Alaska Division and functions as the purchasing and disbursing office for the bureau's Alaskan work, with 7 employees; and the field force in Alaska, which, during the fiscal year 1927–28, included 6 superintendents, 177 teachers, 9 physicians, 28 nurses, 3 employees in connection with the reindeer service, 17 employees on the U. S. S. *Boxer* and on the Yukon River medical boat; also 19 cooks, janitors, and orderlies, a total of 269 employees. Ninety-five schools were maintained with an enrollment of 3,742.

It is interesting to compare the condition of the Alaskan natives to-day with that of the past. When the activities of the Bureau of

Education began in Alaska 44 years ago the Eskimos were in a state of barbarism, with no written language, living in winter in wreched hovels, half underground, and in rudely constructed tents or shelters of skins in summer. There are now many villages in which are cooperative stores owned by the natives, churches, community halls, and comfortable homes with electric lights and heaters. Forty years ago the natives in many parts of Alaska were catching their game with snares made of sealskin or sinew; spearing fish with spears tipped with flint, jade, or bone; and were fishing with nets made of willow roots. These crude implements were not efficient, and whenever the supply of game was scarce, starvation was inevitable. Poor living conditions and an uncertain and ever-limited food supply made the people an easy prey to disease. Statements have been made that there are more deaths than births among the Indians and Eskimos. Statistics gathered from nearly all the villages in all parts of Alaska show that under the improved health conditions the native population is increasing. The births exceed the deaths. The natives are rapidly developing into valuable citizens who will play an important part in the future development of Alaska. Many of the native Alaskans are making good as reindeer men, sailors, engineers, sawmill men, carpenters, mine laborers, teachers, cooks, orderlies, nurses, and in other lines of activity.

Industrial education.—In each of the 95 schools instruction is given in the usual subjects of the common schools; also such industrial training as supplies at hand and local conditions permit. Sewing and cooking are taught in most of the schools, and carpenter work is limited only by the quarters and lumber available. In some of the schools the girls bought flour and other groceries at the native store, which they baked into bread, biscuits, cookies, gingersnaps, pilot bread, doughnuts, and cakes, some of which they sold to the native store. Sometimes reindeer skins were bought from which they made boots, parkas, socks, and mittens, some of which were sold and the proceeds used in buying from the store cloth, needles, thread, and other sewing supplies. In the schools the girls receive instruction in tanning and sewing skins, simple dressmaking, and in general cooking and baking. At some villages berries were brought to school by the children and made into jelly; flour was brought and made into bread; yarn was brought and made into mittens and caps. Utilization of local talent and materials is encouraged. In addition to this industrial work, which is always stressed, each school has done classroom work that would compare favorably with that of the rural schools of the States.

The work of the schools is closely related to the village life. The school republic becomes the village council; the school gardens become the village gardens; the girls in the cooking class become the

bread bakers for the village; the clean-up of the school grounds becomes the village clean-up; the teacher of physiology and hygiene becomes the sanitary engineer for the village; and the schoolboy, who is sent to the reindeer herd as an apprentice, in four years becomes the owner of a herd, the supporter of his family, and a future leader of his people.

Industrial boarding schools.—Three industrial schools, located, respectively, at White Mountain near Golovin on Norton Sound; at Kanakanak on Bristol Bay; and at Eklutna on Cooks Inlet, north of Anchorage on the Alaska Railroad, have been constructed, organized, and equipped; they were opened for the reception of pupils on September 1, 1925, as boarding schools. The purpose of these schools is to offer native boys and girls specialized instruction of an industrial nature for which the ordinary day school is not equipped, and to give training, encouragement, and help to exceptional young people that they may better cope with the peculiar conditions under which they live and render service to their own people by pointing out better ways to utilize the natural resources, to build better homes and communities, and to live fuller, richer, and happier lives.

The aim of the Bureau of Education is to prepare the native boys and girls to make the best living possible in an Alaskan way in Alaska. The three industrial schools are located in strategic points, covering all sections of the Territory except the southeast, where a new school is planned. Emphasis is placed on the promotion of native industries, health and sanitation, and morality in addition to the elementary subjects usually taught. Utilization of Alaska's food supply is an important part of the courses. The boys study problems in connection with the reindeer industry, methods of preparing reindeer meat for cold storage and for the market, cannery processes of the fishing industry, and the growing of vegetables and fruits. A tannery course includes the curing of skins for use as fur clothing and for leather. The boys are taught to carve ivory for use as buttons, beads, carving sets, and handles for knives and forks. Special consideration is given to the tailoring of native fur and leather garments. Standard elementary instruction in commercial work is designed to train the natives as typists, stenographers, clerks, and managers of cooperative stores. Because of the urgent need of better housing conditions among Alaskans, carpentry courses are considered especially important. Directed play includes primitive games as well as basket ball, baseball, and tennis.

During the fiscal year five new schools were established and new buildings provided at Chitina, Chanega, Old Harbor, Kashega, and Koyuk, at a cost of $4,000 for each building.

To four Alaska natives falls the honor of receiving the first diplomas from the Bureau of Education for completing the industrial courses at the White Mountain School in northwestern Alaska, on Norton Sound. Isaac Newlin and his wife, Jennie Newlin, Josephine Kalarak, and Roger Menadelook were the first to complete the school's grammar and industrial courses. The young men and women received their seventh and eighth grade instruction at White Mountain and pursued practical courses in Alaskan industries. The presentation of the diplomas was a big event for all of the 53 native boarding pupils drawn to the school from villages along the coast from Point Barrow, the northernmost extremity of Alaska, to points south of the Yukon River.

When viewed over a term of years, the accomplishments of the Bureau of Education and the resultant development of these natives are most gratifying. In the same home one can see men and women used to a mode of existence of the old stone-age type living comfortably with their children and grandchildren and enjoying the conveniences of a twentieth century civilization.

Disastrous fires.—On January 18, 1928, the two-room school and teacherage at Barrow, erected in 1903–4 at a cost of $6,600 for materials, was destroyed by fire with all school supplies and personal effects of the teachers. Nothing was saved except the coal, gasoline, and coal oil stored in an adjacent building. The teachers and natives met the situation, borrowed from the school at Wainwright, more than 100 miles distant, and transported by dog sleds, supplies, books, and equipment, and reopened school in a storeroom. Congress promptly made an emergency appropriation of $16,000 for the erection of a new building and the purchase of supplies and equipment.

The night of April 1, 1928, a fire of unknown origin destroyed the 2-room log school building at White Mountain. Books, equipment, most of the records, the weekly laundry of the boarding pupils, and a quantity of foodstuffs stored in the building were destroyed. The building was erected a number of years ago as a station school, long before the industrial school was established. Congress made an appropriation of $60,000 for a modern building with equipment and to provide a river power boat and storehouse at Golovin.

On June 8, 1928, the school at Killisnoo, an Indian village on Chatham Straits, in southeastern Alaska, was destroyed by a fire that burned practically the entire village. Congress had adjourned and no money is available with which to provide a school for the natives, most of whom have moved to Angoon, a near-by Indian village.

Kanakanak boys' dormitory.—In the fall of 1927 the Combined Packers' Association deposited at Kanakanak, in southwestern Alaska, lumber, with plans and specifications for a boys' dormitory at Kanakanak Industrial School. By special legislation the Secretary of the Interior was empowered to officially accept this gift.

Frank H. Warren, president of the Portland Packers' Association, arranged for the packers to send carpenters to Bristol Bay on the May boats, along with the cannery crews, to construct the building, so that it might be ready for occupancy by July 20, 1928. The following companies participated in the gift: Nakat Packing Corporation, Seattle; Nanek Packing Co., San Francisco; Bristol Bay Packing Co., San Francisco; International Packing Corporation, Seattle; Alaska Salmon Co., San Francisco; Red Salmon Canning Co., San Francisco; Northwestern Fisheries Co., Seattle; Columbia River Packers' Association, Astoria; Libby, McNeill & Libby, Seattle; Portland Packers' Association, Portland; The Alaska Packers' Association, San Francisco.

Educational statistics.—The following table is a summary of school statistics:

Educational statistics for the school year ending June 30, 1928

Total number of days in actual attendance	397, 829. 00
Total number of pupils enrolled during the year	3, 742. 00
Average daily attendance throughout the year	2, 718. 11
Percentage of attendance	94. 41
Average number in schoolroom each day	29. 94
Total number of schools open	95. 00
Total number of schoolrooms open	158. 00
Average number of days in school year	140. 29
During the year there was spent for repairs on the school buildings and not counted as a part of the operation of the school	$15, 170. 00
Spent for new buildings	16, 380. 00

Community service statistics

District	Visits made to homes	Medical assistance rendered	Number births reported	Number deaths reported	Native population	Number of teachers reporting
Central	2, 901	4, 701	60	43	1, 898	32
Northwestern	2, 889	3, 394	61	34	2, 260	22
Seward Peninsula	4, 636	4, 633	59	15	2, 142	29
Southeastern	3, 343	5, 192	104	168	4, 784	39
Southwestern	1, 963	3, 544	34	40	1, 417	28
Western	3, 666	6, 306	45	41	2, 020	27
Total	19, 398	27, 770	363	341	14, 521	177

Medical relief.—To provide for the medical and sanitary relief of the Eskimos, Aleuts, Indians, and other natives of Alaska, the Bureau of Education employed in Alaska during the fiscal year, 9 physicians, 24 nurses, 6 cooks, and 4 pupil nurses. Hospitals were maintained at Juneau, Tanana, Akiak, Kanakanak, and Noorvik. Contracts were entered into with hospitals at Nome, Anchorage, and Cordova in Alaska, as well as with other hospitals in the States of Washington and Oregon, for the treatment of Alaskan natives.

A large number of native boys and girls were brought to Seattle for special treatment and delicate operations. The service rendered in Alaska during the fiscal year is shown in the following table:

Statistics of medical service by doctors and nurses

	Nurses	Doctors	Total
Number of visits to homes	8,725	201	8,926
Number of patients treated	11,304	5,150	16,454
Number of treatments given	31,286	20,659	51,945
Number of births reported	124	39	163
Number of deaths reported	128	30	158
Total days of hospital care	655	14,601	15,256
Out and clinic patients	657	3,988	4,645
Out and clinic calls	10,052	6,399	16,451

There has been no expansion of the medical service among the natives during the fiscal year other than to station a nurse at Shishmaref on the upper Seward Peninsula, and to make some improvements in the hospital at Tanana.

The Yukon medical boat was again operated during the season. During the summer of 1927, it was in charge of Dr. John Huston, detailed from our Juneau hospital, who was assisted by two trained nurses. The boat went into operation at Nenana on June 1, 1927, and its work was very successful during the early summer. Unfortunately, Doctor Huston fell overboard on July 16 and was drowned. After his death the two nurses continued to treat all cases along the river that required medical attention. During the cruise of the boat, upwards of 1,473 patients were treated and much dental work accomplished, including 884 extractions.

During the spring of 1928 repairs were made on the engines of the boat, which went into commission at Nenana, June 8, 1928, with a doctor, dentist, and two nurses. It arrived at Tanana on June 11, and went up the Yukon River for the earl summer, planning to visit the lower river during July, August, and September.

The U. S. S. Boxer.—The *Boxer* left on its third voyage of the season on July 20, 1927, with 14 passengers and a full cargo of supplies for distribution to stations on the shores of Bering Sea and the Arctic Ocean. It returned to Seattle in December with 500 reindeer carcasses from Point Hope, Kivalina, Kotzebue, and Wales. On May 7, 1928, the *Boxer* left Seattle with a full cargo of supplies and 5 teachers for the lower Kuskokwim River, Hooper Bay, Nunivak Island, Nelson Island, and St. Lawrence Island. With the usual cargo was a building for the new school at Egegik and considerable equipment for the Kanakanak Industrial School, including lighting plant, laundry, and heating plant for the boys' dormitory building, donated by the Combined Alaska Packers' Association.

Reindeer in Alaska.—The reindeer industry is no longer an experiment although still in its infancy. It is estimated that there are

400,000 square miles of barren tundra in Alaska, and everywhere on this broad expanse the reindeer can find the long, fibrous, white moss which is its food. Many estimates have been made of the number of reindeer in Alaska and their distribution. During the fiscal year a count has been completed and the following is the tabulation of the reports made of the count by the district superintendents:

District	Deer owned by Government	Deer owned by natives	Deer owned by white men	Total
Seward Peninsula	2,217	86,476	42,511	131,204
Northwestern		116,000	14,000	130,000
Western	2,614	30,624	18,131	51,369
Southwestern	695	7,603		8,298
Central		245		245
Total	5,526	240,948	74,642	321,116

The reindeer of the natives are largely owned by cooperative associations organized by the natives, as is shown by the following table:

Name	Location	Estimated number of reindeer
Farthest North Reindeer Co	Barrow	12,000
Wainwright Reindeer Co	Wainwright	9,732
Point Hope Reindeer Co	Point Hope	4,100
Kivalina Reindeer Co	Kivalina	13,913
Kotzebue Reindeer Co	Kotzebue	7,000
Noorvik Reindeer Co	Noorvik	5,000
Selawik Reindeer Co	Selawik	6,000
Deering Reindeer Co	Deering	6,000
Buckland Reindeer Co	Buckland	18,000
Cape Reindeer Co	Wales	18,000
Reindeer Commercial Co	Gambell	8,000
Do	Sevoonga	12,000
Alitak Reindeer Co	Alitak	245
Council Reindeer Association	Council	8,000
Kuskokwim Reindeer & Trading Co	Akiak	30,000
Total		157,990

Provision was made in the appropriation for the fiscal year 1929 for a supervisor of the entire reindeer service.

D. Library

The major project carried on by the library division during the past year has been the collection and organization of information regarding research studies in education, both those in progress and those recently completed, conducted by various agencies thorughout the country. This service was undertaken in answer to repeated requests that the Bureau of Education should render it. For this purpose letters and report-form cards were sent to all known agencies and institutions in the United States engaged in educational research, requesting reports of studies under way and of those completed during the year 1926–27. Large returns to this request have been received, both in the

way of reports of studies and in copies of the studies themselves, which were sent when available. All this material has been edited, classified, and placed on file for consultation in the library. Two mimeographed bibliographies of research studies in progress, 1927–28, were prepared and distributed in March and May, 1928, respectively. A bibliography of research studies in education was also prepared for printing as a bulletin; it was completed during the year ended June 30, 1928. All these research bibliographies are annotated and equipped with indexes and cross references. Abstracts of many of the studies were supplied by the authors or agencies reporting them, others were annotated by various specialists of the bureau, and the final editing for publication was done by the library division. A beginning was also made in compiling a bibliography, to be published later, of research studies in education completed during 1927–28. During several months an assistant educationist was temporarily employed to aid in the research information service.

The other bibliographical and reference service of the library has continued unabated during the year. The lists of references, either typewritten, mimeographed, or printed, were in great demand and were extensively circulated. Bibliographies on Education for Citizenship, and on Play and Recreation were prepared for printing as library leaflets. Copy for a new library leaflet on Higher Education was also prepared. The final issue for 1927 of the Record of Current Educational Publications was provided with an index for the entire year and prepared for printing, the earlier issues having been already published.

The reading room of the library was increasingly used by students of education and by investigators during the past year. A large number of volumes were lent to borrowers both within and outside Washington.

The library continued its growth by numerous accessions. It added largely to its files of publications of State and city departments of education, and it established a new complete file of current catalogues and reports of American colleges and universities.

Cooperation with the Library of Congress was continued by supplying copy for printed catalogue cards for educational books, in the series supplied by the card division of that library. The library also handled a large amount of correspondence, and attended to the binding of periodicals and serials.

E. Publications

Publications of the Bureau of Education in the fiscal year of 1928 consisted predominantly of papers for the biennial survey of education. Thirty-two bulletins were issued; 16 of them were chapters of the biennial survey; and 8 of the 16 were of statistics. In extent

and expense the eight constituted the most important class of publications of the year.

The whole number of documents printed in the year ending June 30, 1928, was 68, of which 32 were bulletins, 11 leaflets and circulars, 1 report of the Commissioner of Education, 10 numbers of School Life, 12 numbers of the clip sheet, and 2 miscellaneous publications.

The allotment of funds for printing was less by $3,000 than in 1927, and the total output of printed matter was less by 26 documents than in the previous year.

With lessened appropriations further decrease was necessary in the extent of the individual documents and in the size of the editions. The average number of pages per bulletin was less by 32.2 in 1928 than in 1927. Thirty manuscripts prepared by members of the staff of the Bureau of Education were in the files of the editorial division awaiting publication at the end of the year. They could not be printed promptly after their completion because no money was available.

The Bureau of Education is fortunate in having an able and productive staff; but the country does not have the full benefit of their labors, because the sums required for publishing the results of their investigations are not provided.

F. Activities of the Commissioner

During the fiscal year just closed the Commissioner of Education traveled 39,099 miles in rendering service in the field. The expense for this service was borne almost entirely by those to whom service was rendered. He made a total of 94 addresses before various National, State, and local organizations, before audiences aggregating 89,705 persons without estimating radio listeners. He published 17 articles bearing upon educational matters. There were the usual number of conferences and interviews in the office in Washington and in connection with field trips.

G. Recommendations

(1) Recommendations which I have made in past reports with reference to the enlargement and activities of the Bureau of Education need not be repeated here, but it is well to emphasize the increasing need of research in the field of education on a comprehensive basis such as no other agency aside from the Bureau of Education is in a position to perform. Perhaps this purpose may be served by the organization of a number of successive studies national in scope, with definite objectives and limited in time, for which specific appropriations may be asked. I have in mind a series of studies similar to the survey of the land-grant colleges and universities, which is now in progress. In the preliminary estimates now under consideration by the Bureau of the Budget, we have included an estimate of $50,000

to begin a study of secondary education, to be followed in successive years by appropriations of $75,000 and $100,000, respectively. Two hundred and twenty-five thousand dollars would be a small outlay for a comprehensive study in the field of secondary education, with a view to bringing about some order in this chaotic section of education. The National Education Association and numerous regional associations have passed resolutions that such a study be made.

The Bureau of Indian Affairs has asked the Bureau of Education to make a study of Indian schools and to suggest methods for their improvement. This study has been approved by the Secretary of the Interior, and a preliminary visit made to a number of Indian schools with a view to setting up this investigation. Using the report of the Institute for Government Research as a basis, a very valuable service can now be rendered through the Bureau of Education to the Indian schools.

The State superintendents of public instruction and commissioners of education have decided to hold a two-day conference in Washington in December with the Federal Commissioner of Education. One of the problems which they propose to discuss is the support and financing of schools. In view of the fact that the costs of public schools have more than doubled in the last few years, it seems that such a study would be highly serviceable to the cause of education; measures might be formulated in the interest of economy that would prove most efficacious. This whole field is relatively unexplored. Every conceivable form of taxation is used in the effort to support schools. No one has attempted to show the most satisfactory ways of raising funds for school purposes. A sound and economic program for expenditures is equally as important as a proper system of revenue. These and other studies ought to be made as quickly as funds are available.

(2) In my last report I set out in some detail the situation with reference to printing funds for the Bureau of Education. This remains the most acute need of the bureau. At present the bureau is not able to print all of the studies which are produced by the specialists. This is an unsound and uneconomic procedure. The Bureau of Education is essentially a bureau of research and information. If the channels for communication through printing are not kept open, its research function is enormously impaired in value. There is nothing that I could urge more emphatically than the necessity for adequate printing funds if the bureau is to enlarge its usefulness.

(3) The program of improving the Alaskan service is progressing. The Governor of Alaska during the summer made a tour of inspection in the Territory largely by airplane and reported most of our schools in much improved condition. The program of industrial training in Alaska is proving satisfactory, and an industrial school in southeastern Alaska, similar to the three which have been established in other parts

of the Territory should be erected as early as feasible. The matter of transferring the health work among the natives of Alaska from the Bureau of Education to the United States Public Health Service has been carefully investigated. The Public Health Service recommends that this work be continued in the Bureau of Education; it is of the opinion that the work now being done by the Bureau of Education is as satisfactory as could be expected with the limited funds available.

I am glad to report continued progress in the solution of the reindeer problem. Several relatively large boats, with considerable refrigeration, are now operating between Alaska and Seattle and larger quantities of reindeer meat are being brought down. A trial of reindeer meat was made in the United States Navy but unfortunately an attempt was made to substitute reindeer meat exclusively for beef. Under such circumstances it was hardly expected that reindeer meat would be preferred in all cases to the beef. Nevertheless, a very considerable proportion of the men expressed such a preference. If reindeer meat were placed on the rations as an alternative, I believe that a large amount of the surplus supply would be thus consumed in the Navy. We have now appointed a reindeer man who will have charge of the general administration of the whole reindeer industry in Alaska. Under him will be an organization of supervisors and natives trained for the work. Arrangements have been made whereby a number of natives will be sent each year to the college at Fairbanks where they can be given scientific training in the husbandry of reindeer. A reindeer experiment station is maintained at that point and this would seem to be an ideal way of translating the scientific information obtained into practice by the natives. A succession of trained natives going into the industry would rapidly improve the whole system of handling deer.

The great increase in the number of herds of reindeer in northern and western Alaska rendered it urgent that provision be made for the allotment of grazing lands. By the act of March 4, 1927, authority was granted for the establishment by the Secretary of the Interior of grazing districts in Alaska and for granting leases for definitely described areas. The provisions of this act are being carried into effect as rapidly as possible. This action will regulate the occupancy of grazing lands by the reindeer herds and prevent friction among the owners of reindeer in regions where the herds are numerous.

In extending the reindeer industry among the natives the reindeer were distributed among them through a system of apprenticeship which has resulted in a large number of individual owners. In 15 widely separated regions native owners have combined their herds and formed cooperative associations in order to safeguard their

interests. More efficient methods for the sale of meat and hides, economy in herding, and simplification in marking reindeer have resulted. Thus one mark for the entire association answers for the large number of marks of individual owners.

Let me say that I believe the Bureau of Education is on the eve of marked development and a larger service to education in the country. During the next few years its activities will become considerably more valuable and effective than they have been in the past.

May I take this opportunity to express my appreciation for the evident interest which you have displayed in the Bureau of Education during the short time in which I have had the honor to work with you. Your educational background and enthusiasm for the cause of education augur well for the educational outlook and particularly for the improvement of this bureau.

Respectfully submitted.

JNO. J. TIGERT, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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UNITED STATES DEPARTMENT OF THE INTERIOR

ANNUAL REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR THE

YEAR ENDED JUNE 30

1929

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THE BUREAU OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

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March 14, 1867, to March 15, 1870

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March 16, 1870, to August 5, 1886

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August 6, 1886, to September 3, 1889

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July 1, 1906, to June 30, 1911

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July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to August 31, 1928

WILLIAM JOHN COOPER, LL. D., ED. D.
February 11, 1929

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ANNUAL REPORT OF THE COMMISSIONER OF EDUCATION

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, D. C., September 24, 1929.

SIR: I have the honor to submit the following report for the year ended June 30, 1929, of the operations of the Bureau of Education, including some of the principal events in the field of education during the year, together with some recommendations for improving the effectiveness of the bureau.

The report proper follows in general the plan adopted by Commissioner John J. Tigert. The text was written at my request by Mr. L. A. Kalbach, chief clerk of the bureau, based upon reports turned in by chiefs of the various divisions. The section of the Alaska Division is as prepared by Doctor Hamilton, assistant chief of that division.

Mr. Kalbach more than any other was in a position to give unity to this report, since during the fiscal year he was de facto commissioner for a longer period than anyone else. Doctor Tigert served until August 31, 1928, when he became president of the University of Florida. Mr. Kalbach then became acting commissioner, serving until the undersigned took the oath of office on February 11, 1929.

The recommendations at the close of the report your commissioner has written after some six months of observation and study.

I. REVIEW OF RECENT EVENTS IN EDUCATION

STATISTICS OF EDUCATION

The greater part of the statistics which concern education in the United States are collected and reports are published biennially. No complete compilation, therefore, has been made since the last annual report. During the fiscal year just closed reports were received from 33 State departments of education for the school year 1927–28. Reports from city schools, public high schools, and colleges and universities have all been received and the data are in process of compilation.

Reports from 339 teachers colleges and normal schools show that 274,348 students were preparing for the profession of teaching. In State institutions 1.4 per cent of the students were preparing to teach in kindergartens; 15.3 per cent in primary grades; 5.3 per cent in kindergarten-primary grades; 25.5 per cent in upper grades of the elementary school; 12.1 per cent in elementary grades not designated; 7.8 per cent in rural schools; 9.7 per cent in junior high schools; 15.2 per cent in regular or in senior high schools; 7.2 per

cent in high schools of a type not specified; or about 68 per cent of the total in rural and grade schools and 32 per cent in junior and other high schools.

A circular was issued upon the per capita cost in teacher-training schools. State normal schools with fewer than 400 students spent on an average $363.31 for each student in average attendance; those with 400 to 799 students spent $278.97; and those with 800 or more students spent $226.10 annually. State teachers colleges spent $439.67, $355.37, and $263.80 per student in schools of these same sizes and in the same order.

Reports were received from 2,448 private and parochial high schools which had 20,333 instructors, 269,249 pupils, and 46,189 graduates for that year. This is an increase over 1926 of 12.8 per cent for instructors, 8.5 per cent for pupils, and 13.4 per cent for graduates.

A circular was issued upon per capita costs in city schools. These per capita costs are based upon the number of pupils in average daily attendance in day schools and are for current expenditures, exclusive of debt services. Among 35 cities having a population of 100,000 and over this per capita cost varies from $59.02 per pupil to $157.37, with an average for the group of $113.69. Of this total, 3.4 per cent went for general control; 76 per cent for instruction; 10.2 per cent for operation; 5.4 per cent for maintenance; 3.3 per cent for coordinate activities and auxiliary agencies; and 1.7 per cent for fixed charges. Among 60 cities having a population between 30,000 and 100,000 the per capita cost ranges from $39.73 to $149.51, with an average of $96.78.

Reports from 33 States indicate that elementary-school enrollments increased slightly over 1926; that secondary-school enrollments, including all grades in junior high schools, increased about 4.5 per cent, and that the total public high-school enrollment is still under 4,000,000; and that expenditures for public schools increased about 4.6 per cent, or to a total of about $2,120,000,000 for the school year 1927–28.

Bulletins were issued upon Uniform Records and Reports and upon Accredited Secondary Schools. Considerable material was collected and tabulated upon acceleration and retardation in the elementary schools.

HIGHER EDUCATION

First among recent significant events and tendencies in higher education is the increased scientific study and investigation of institutional problems and objectives. Such study, which has not in the past characterized higher education to the extent displayed in other fields of education, has been reported during the past year by scores of universities and colleges. The emphasis is now on scientific and semiscientific methods of investigation of institutional problems rather than on the older methods of philosophy and on the mere observance of tradition. More rapid adaptation on the part of the higher institutions has become imperative, due to the multiplication of social and economic problems incident to the advent of increasing industrialization, machine production, changing social customs, and

other characteristics of our shifting civilization. Research and scientific study are increasingly depended upon by the higher institutions as the basis for adaptation of their practices and purposes.

The necessity for rapid institutional adjustment to the changing needs and increased demands of society has affected in some degree almost every aspect of higher education. Administrative organization is affected in several ways. There is an emphasis on unity, rather than separatism, in the organization of related activities leading to the realization of the accepted objectives of the institutions, as in adult education, teacher training, and graduate and research work. Graduate and research programs have been subjected to close scrutiny, and changes are in process in both organization and objectives. Changes in general organization of collegiate work are illustrated by the increase in growth of junior colleges. During the past year an increase of more than 25 per cent in the number of junior colleges reported is noted in the Educational Directory published by the Bureau of Education. Fundamental changes have been proposed in the organization of our existing system. The proposal to reorganize on a six-four-four basis has received a wide and interested hearing. This plan provides for 6 years of elementary education, 4 years of a new-type secondary education, and 4 years of secondary-collegiate education. University training for qualified students would then begin at what is now the junior year in college. The plan contemplates closer correlation of the high school and the college, growth in the number of junior colleges, and changes in the objectives of the 4-year liberal arts colleges.

A significant fact in relation to the quantity of output afforded by the higher institutions is seen in the very small increase for the past year in the registration of full-time students in the colleges and universities. An estimated increase of 2 per cent, the smallest since the World War, is reported by institutions on the approved list of the Association of American Universities. Enrollments increased approximately 25 per cent over the previous period of five years. It is possible, but by no means certain, that a period of stabilization is near at hand. Collegiate enrollments in the United States are now decidedly higher proportionately than in any other country in the world. The rate of increase in the enrollments in high schools, from which are drawn most college students, has been slackening for three or four years. The American birth rate is becoming substantially lower. Changes in agricultural and industrial conditions have affected college enrollments. With some of the pressure of numbers removed, and with a continued increase in financial support, stress may now be put by the higher institutions on quality of output. Refinement of instructional procedures and more effective utilization of improved material facilities suggest that higher education is about to enter a new phase of development.

The adaptation of the colleges and universities to the demands of a changing age is further illustrated in a tendency to study more intensively and to meet more closely the needs of the student personnel. Students of educational administration are now inclined to judge an institution by the quantity and quality of its human product, rather than by the amount of institutional income or the nature of its physical plant. The desirable changes made in human beings as result

of the educative process constitute the best index to institutional effectiveness. The institutions are studying as never before both the quantitative and the qualitative demands by society for their human product. The introduction in several institutions of honor courses, the extension of plans for independent study, employment of improved techniques in student counseling and guidance, and application of more wholesome concepts of student discipline and management have all been increasingly in evidence during the past year. The creation of the National Student Personnel Committee, fostered by the National Research Council, illustrates a nation-wide interest in the field of student-personnel study.

The insistent demand of present-day society for more effective productivity by the higher institutions has resulted in a marked emphasis upon effective teaching by members of the faculties. Some reasons for this increased emphasis include the influence of a largely increased body of scientific studies and the general advancement of education as a whole; an unprecedented influx of students, many of whom do not have the natural ability which makes them easily susceptible to the educative methods and offerings of the past; a growing realization of the needs of superior students. Conferences, summer-session work, and intervisitation of college teachers as means toward instructional improvement were perhaps more widely noted during the past year than ever before in the history of higher education. That a considerable body of valid and usable material on the instructional aspects of higher education now exists is evidenced by the extensive bibliographies published during the year. Administrative officers of the institutions are taking an active interest in the advancement programs of improvement in faculty instruction. As a result, it is now the rule rather than the exception to find in the institutions of higher learning some type of program directed toward the improvement of teaching. National and regional associations, such as the Association for the Advancement of Science, the National Society for the Study of Education, the National Society of College Teachers of Education, the American Association of College Teachers, and other professional groups have shown a strong interest in the subject during the past year.

RURAL EDUCATION

Significant movements in rural education rarely begin and culminate in so short a period as one year. Nevertheless certain forward steps furthering progress in this field in 1929 are worthy of note.

The movement for State centralization of responsibility for setting up standards and for financing them or assisting to the extent that they are practicable and attainable by local communities has gained in scope and effectiveness. It has been characterized by certain significant tendencies: (1) Plans proposed for increased funds and improved standards represent the results of state-wide research and statistical studies. (2) The projects are initiated by or actively promoted from State agencies and organizations, particularly State departments of education. (3) Increased funds from State sources, generally including sources not previously used for school support, distributed on some type of equalizing basis, are contemplated in the programs proposed or enacted. Illinois, New York, Alabama, and

Louisiana are examples of States in which the 1929 legislative sessions provided increased or more equitably distributed State funds, or both. The projects were sponsored by State departments of education and involved careful study of conditions affected and efforts extending over a period of years.

New York reached "the third step" in a financial program begun in 1925. The first step resulted in increased funds distributed on an "equalizing quota plan" and affected districts having a population of fewer than 4,500. The second step provided for additional apportionment to all schools, the larger portion distributed by the "equalizing quota plan" to all school tax units employing five or more teachers. The third step (1929) affects two, three, and four "teacher districts" and provides for 1-teacher schools a minimum from State and local funds of $1,300 the first year, $1,400 the second year, and $1,500 the third year and each year thereafter. "This is an entirely new proposal for small districts. It will add four or five million dollars more in State apportionment to schools."

The Alabama plan, which becomes effective this year, represents the culmination of efforts extending over a period of years and affects school standards as well as the amount and distribution of State funds. In Illinois an addition of approximately $2,000,000 was made to State appropriations during the past legislative session, and in Louisiana a new tax on malt sirup was provided in the fall of 1928.

Efforts to secure larger units for administering local rural schools are continuing with increasing vigor. An "optional" law for the county unit system, passed recently in Minnesota, became effective this year in at least one county—a new departure for Minnesota. Through favorable legislation the county unit plan has been extended in Texas and strengthened in Virginia. In Georgia the State department of education reports that through county-wide plans for consolidation and voluntary surrender of their independence on the part of small districts several county systems have been strengthened and additional functions centralized therein. The legislation proposed and advocated by education officials and organizations for larger units for administering rural schools than the prevailing district system, better financing methods, and other progressive measures in education was defeated in Kansas and Missouri, as was the county unit plan in California.

Reorganization of State boards of education in Virginia and Texas, which it is expected will eventually strengthen their authority and prestige and increase their functions, was effected during the year. From California two important steps affecting rural education are reported. State aid for the education of migratory children has been provided. This will enable the school to follow up children as they move from one locality in which parents are engaged in seasonal occupations to another. The distribution of funds for supervision has been "equalized," placing rural communities on a par with urban communities in the distribution of State subsidies for supervision. This change in the law is expected to result in 50 additional rural-school supervisors during the coming year.

A study completed during the year in the Bureau of Education shows that the number of members of State departments assigned to work with rural schools has increased materially during the past

seven years. There are now 172 members of the State education departments assigned to rural education in 38 States. Different titles are used for these officers; rural-school supervisor is that most commonly used. The total amount spent on supervision for rural schools by State departments of education has practically doubled during the 6-year period ended in 1928–29.

Another study completed during the year is concerned with the salaries of county superintendents or officers having similar duties but with different titles. During the 6-year period studied there has been an increase of approximately $500 in the median salaries paid such superintendents. The maximum salary was increased $500 to $5,000 in 29 States. At the same time the study points out there still exists a wide disparity between salaries of city and county superintendents when comparisons are made on a population basis.

Efforts of at least three kinds to improve instruction have been noticeable during the year: (1) Coordination of the functions of the several agencies concerned with teaching and the teaching force, such as pre-service and in-service training, placement agencies, certification; (2) through raising standards for teaching certificates and establishment of special and corresponding courses in teacher-preparing institutions for training rural teachers; and (3) through the extension of and improvement in local rural-school supervision.

The movement for improving standards of teaching certificates has been going on for a number of years. During the year Illinois, New Hampshire, and Oregon enacted legislation setting a definite date after which two years of professional training above high-school graduation will be the minimum qualification for any grade of teaching certificate. The requirement is effective in New Hampshire. In Oregon and Illinois it becomes effective in 1931 and 1933, respectively. Iowa and Minnesota are among the States in which minimum qualifications looking toward the 2-year standard in the future were set up during the year. The minimum in Iowa is 12 weeks above high-school graduation; in Minnesota, one year. Several States placed additional limitations on the number and percentage of certificates issued on examination; Virginia discontinued the practice.

Recent studies have thrown considerable light on questions of supply and demand in the teaching force and on the situation as regards special training of teachers in rural high and elementary schools. Where there is a surplus of teachers, teachers prepared for high-school work are employed in elementary schools, while a large percentage of those trained to teach one subject only accept positions in small high schools where they must teach several, for some of which they have not had adequate preparation. It appears that there is much need for establishing specialized courses adapted to the particular needs of teachers in the small high schools and for courses to prepare teachers for one, two, and three teacher elementary schools.

Approximately 151 of the 185 State normal schools and teachers colleges in the United States are now offering differentiated courses or curricula for prospective rural elementary-school teachers. Among these institutions the two-year curriculum is the one most commonly offered. However, some institutions offer a one-year curriculum and others three and four year curricula for the preparation of rural teachers.

During the year educational surveys, state-wide in scope, have been completed in Virginia under the auspices of the Educational Commission of Virginia, West Virginia by the State Department of Education, and Florida by the Florida Educational Survey Commission. A state-wide survey by the New Jersey Educational Survey Commission is now in progress in New Jersey. County studies have been made in Alabama under the direction of the State department of education.

In local rural-school supervision progress has been in two directions: First, through extension of supervision, both in the number of supervisors and the territory supervised; and, second, through improving the quality of the supervision rendered. Legal provision for the employment of supervisory assistants to the county superintendent was made during the year in Mississippi and Texas. Increases in the number of rural supervisors employed are reported from Arkansas, California, Florida, Georgia, Maryland, Michigan, New Jersey, North Carolina, Virginia, and West Virginia. In Alabama, Virginia, and West Virginia the increase has been marked. In Alabama an "equalization of educational opportunity plan" recently adopted provides funds to finance a project which contemplates one supervisor for each group of 75 teachers. In Louisiana a newly-acquired equalization fund of $1,500,000 is expected to extend supervision. The situation in California has been noted. At the present time there are reported 818 supervisory assistants to administrative officers in the United States who spend at least half time in the supervision of instruction. Minnesota and North Dakota have extended during the year, through additions to the State staff, the plan for improving institute instruction.

Considerable attention has been given in New Jersey and North Carolina to improving supervision by principals in consolidated and other large rural schools. In Connecticut "primary supervisors" have given special attention to improving instruction in the one and two teacher schools. In California considerable emphasis has been placed upon individualized instruction in the rural schools. A number of State rural school supervisors report increased use of the results of research and increased participation in carrying on research studies by supervisors. Special studies reported during the year concern the improvement of teachers' meetings in the Southeastern States, a study of developing superior teachers in New York, a study of measuring results in supervision in consolidated schools in North Carolina.

In the field of rural secondary education standardization of the small high schools has been one of the major problems with which State departments have been concerned during the year. Recent studies indicate that there are limits in high-school enrollment and teaching staff below which it is impracticable for a school to attempt secondary education. Such studies are reported from Ohio, Virginia, and Wyoming. A study recently completed in the Bureau of Education shows that in 1926, 11 per cent of the 9,875 4-year rural high schools in the United States enrolled fewer than 30 pupils each; 30 per cent, fewer than 40; and 32 per cent, fewer than 50. More than 6 out of every 10 of these 4-year rural high schools enrolled fewer than 75 students; 65 per cent employ a staff of fewer than four teachers, and 14 per cent operate with only one or two.

Various forms of consolidation, union districts, county high schools, agricultural high schools, wing schools, and reorganization on the junior high school basis are some of the means used to improve the situation. Thus far it is safe to estimate that fewer than 30 per cent of the children of high-school age in rural areas have access to high-school instruction. To a large degree the problem of making secondary education available to rural children is still unsolved. A few experiments in instructing rural children in their homes by itinerant teachers, through correspondence courses and modified plans of "individualized instruction," are reported.

Activity in curriculum construction by State school authorities has been widespread. Rural schools are those most affected by State courses of study. Complete courses formulated during the year are reported from Iowa, Minnesota, Nevada, North Dakota, Virginia, and Wisconsin. In California, where heretofore the counties as well as the cities have assumed responsibility for the courses of study used, a State curriculum commission has been appointed. In California and in Indiana, where an executive committee has recently been appointed by the State superintendent for the purpose of revising the State course of study, it is expected that textbook adoptions will be preceded by programs for curriculum revision.

Certain of the more recent State courses are organized by groups of related subjects replacing the single-subject plan. Those of New York, Wyoming, and West Virginia are examples of such organization. In the New York plan the "health group" includes personal hygiene and sanitation, physical education, health inspection, and nutrition. English includes reading, literature, penmanship, spelling, oral and written composition, and grammar usage. Similar combinations are made in the social sciences, the arts group, and the natural-science group.

Interest in the opportunities for reading which children and adults in rural communities enjoy is apparently increasing. A few indications are: Publication during the year of a number of articles on county libraries, including a series in School Life and single articles in several State education association journals; enactment of laws permitting the establishment of county libraries in Arizona, Colorado, Delaware, Oklahoma, and Tennessee; a law permitting the use of district funds for school libraries in Nebraska; and coordination of the State library and traveling library department with the State department of education in Washington.

A study published during the year in California, where cooperation between rural schools and county libraries is well established, compares library service in rural schools under the county library system and that under the separate district library system, pointing out the greater efficiency of the former. Another study, made in Cullman County, Ala., indicates that books from the county library taken home by school children are read by more persons in the homes than in the schools. The American Library Association reports the number of county libraries as 263, an increase of 3 during the year.

CITY SCHOOL SYSTEMS

The movement for the scientific study of elementary and secondary education is gaining momentum in the city schools of the

country. The number of research departments which are giving attention to curriculum study and to testing programs is increasing. The testing movement which began in the elementary schools is extending rapidly into the high schools. Of 142 research departments reporting to the Bureau of Education, more than one-fourth had city-wide testing programs in operation in the high schools this year; between one-sixth and one-fifth administered achievement tests in one or more subjects; one-ninth offered pupils the advantage of various other kinds of tests such as aptitude, prognosis, health, and the like. The pupils in the junior high school are tested more frequently than those of other secondary-school grades. A student entering any of the junior or senior high school grades is more likely to be tested than a student previously registered.

Testing programs in the elementary and high schools are assuming a new meaning, since tests are no longer given simply to find out how much the pupils know or how much they have achieved as compared with a standard norm. No testing program is now considered complete without its remedial program.

That the scientific movement in education is going forward is further evidenced by the fact that in many of the larger cities and in some of the smaller ones, especially those cities having educational research bureaus, many interesting and promising experiments are under way. The Detroit experiment in measuring the effect of individualization may be cited as an example. In general the plan as explained in the Detroit Educational Bulletins issued in 1928–29 consists of a trial under experimental conditions of several distinctly different degrees and kinds of individualization. Two schools, one a 24-section platoon school and one a 16-section platoon, are using each of the following different plans: (1) Much individualization; (2) some individualization (horizontal grouping); (3) little individualization or mass instruction; (4) Winnetka plan; (5) Dalton plan; (6) vertical grouping.

The purpose of the experiment has been to discover whether or not each particular amount of individualization, or particular scheme for organizing it, can be used successfully in the regular public schools of a large city.

Denver, Colo., may be mentioned as another city that is undertaking an extensive experimental research program. Fifteen important research studies were reported under way in the schools of that city in October, 1928.

As yet few school systems are working on the same research study. One study, however, in which a number of cities are cooperating deserves special mention, and that is the investigation under the direction of Dr. Thomas E. Finegan, of Eastman Kodak Co., to discover the value of the teaching film in the classroom. Twelve cities have been cooperating in the experiment, which has involved about 12,000 children in the elementary and junior and senior high school grades.

Articulation of the curricula of the various school units is occupying the attention of city-school superintendents and others. Much is being done to articulate the work of the kindergarten and primary school grades, which not so many years ago was almost wholly unrelated. Better articulation is being effected by placing the kindergarten and primary grades under one supervisor.

With the increase in the number of units in the secondary school, educators are realizing more fully than ever before the need of articulation and correlation between the several units and between secondary schools and colleges. Several studies on articulation which generally but not exclusively concern themselves with city secondary schools are under way. The department of superintendence of the National Education Association last February released an extensive series of studies on articulation and has announced another series to be reported upon in 1931. State agencies in Pennsylvania have embarked upon a 6-year study of the relation between secondary and higher education. Regional standardizing agencies, which have interested themselves in the relationship between secondary schools and colleges within their respective territories, have, during the present calendar year instituted a significant movement for a unified study of this subject in which all may participate on a cooperative basis.

Visual instruction, although not a new method of instruction, is receiving much attention from city-school superintendents, supervisors, teachers, and others. The present wide interest in this method of instruction is due largely to the popularity and the educational possibility of the motion picture, but all other visual aids, such as graphs, stereographs, and stereopticon slides, are receiving attention as never before.

That there is a widespread interest in films as a means of instruction is indicated by the fact that school buildings are not now considered fully equipped unless they have one or more motion-picture machines. Several cities have already installed such machines in practically all their school buildings. In order to solve the many administrative problems that have arisen in connection with the use of films and other visual aids, departments of visual instruction are organized in some cities to take care of and to distribute films and slides, to help select visual-education materials, and to adapt them to the course of study.

Instruction by radio is also receiving much attention. Many city schools are equipped with receiving sets and others are installing them. The Ohio State Legislature has appropriated funds to be used for the extension of elementary education through the use of radio broadcasting. Mr. B. H. Darrow, director of educational broadcasting, State of Ohio, writes in School Life, June, 1929, "This marks a new milestone in education and in radio." He states that in the survey which preceded the launching of broadcasts more than 1,200 schools signified their intention of equipping with radio sets if the broadcasts were given.

The Chicago Schools Journal, January, 1929, reports as follows regarding radio broadcasting for the Chicago schools:

> Two periods of broadcasting are conducted daily by the Daily News over its station WMAQ; the first, for children of the first six grades and the other for junior high school pupils. The talks are carefully fitted to the needs of the curriculum of the children. While it is true that the whole program is in an experimental stage, there is no doubt that a beginning has been made on an educational device of great importance for Chicago.

City schools are realizing the need of organizing a program of safety education and curricula are being prepared in which necessary information for a child's self-protection is outlined as content for language and composition lessons and dramatic work. The courses in

safety are usually designed to correlate with most of the subjects taught in the schools. Safety clubs under various names may be found in many cities; such as junior safety councils, safety patrols, and civic leagues, which are doing much to help the schools teach safety in a practical way.

Integration of all school activities has become a popular phrase among many city-school supervisors and teachers. The extent to which they demonstrate the idea underlying integration can not now be determined, but an indication that this idea is put into practice is found in the number of courses of study which advocate teaching through units of work rather than the teaching of isolated subjects.

The tendency is to lengthen the school day so that children in the elementary-school grades may have more time for play, physical training, and handwork, and so that high-school pupils may have more time in school for study and for extracurriculum activities. Of 800 cities reporting, 84 have within the past two years lengthened the elementary-school day, 102 the junior high school day, and 122 the senior high school day. The usual increase in the elementary schools has been 30 minutes, and in junior and senior high schools 30 or 45 minutes.

A longer school term is generally advocated by city-school superintendents and by many other persons, since they realize that with a school year of 180 days and with children in school about five and one-half hours a day a comparatively small amount of the time at the disposal of children is spent in school, and that under modern city conditions there is nothing much for children to do when they are not in school. Some progress is being made in lengthening the city-school term. Within the past two years 50 of 800 cities reporting have added from 5 to 20 days. Recently the State of New York increased the minimum school term to 190 days a year. More and more cities are conducting summer schools which afford an opportunity for many children to attend school about 30 more days a year.

The amount of educational and professional training required of elementary-school teachers for first employment is being increased. In the comparatively few cities that required but one year of training beyond high school the requirement is being uniformly raised to graduation from a 2-year normal school. In some cities that required two years' training of its elementary-school teachers the standard is being raised to three or four years. The tendency is to raise the requirements for the first employment of junior high school teachers to four years of college work with professional training and to require about 18 hours' professional training on the part of prospective high-school teachers. The movement in the direction of requiring a master's degree for academic senior high school teachers is pronounced in some cities. Since city normal-school courses are being raised to three or four years and since the normal schools in many of the States are being converted into teachers colleges, it is possible for many of the city schools to obtain better-trained elementary teachers than formerly.

The median teacher's salary in 1928–29, according to data compiled by the National Education Association, was for the cities of the country as a whole slightly higher than the median salary in 1926–27.

The number of cities adopting the single-salary schedule—that is, a schedule providing the same salary for teachers having the same qualifications whether they teach in the elementary or high school grades—is increasing.

The expansion movement in secondary education, which has been in progress since the World War, continues without perceptible slackening. Organization of secondary education into two units of four years each appeared unmistakably in two school systems; thus this long-heralded type of organization is now definitely in operation. The number of junior high schools in the cities of the country is increasing about 10 to 12 per cent each year. Reports from the field indicate a marked increase in the number of undivided—i. e., five or six year—high schools in the smaller cities. There is a noticeable and not infrequently stated policy for school systems in large cities to be wholly reorganized on some other than the traditional 4-year high-school basis as soon as satisfactory building readjustments can be effected.

Among the many other movements that are receiving the attention of city-school superintendents are the platoon plan of school organization and the Winnetka and Dalton plans of individual instruction. During the year 24 cities have organized one or more platoon schools, bringing the total number of cities having such schools up to 153. About 80 cities report that they have within the past two years introduced the Winnetka or Dalton plan, but usually with modifications of the plan.

A much-discussed phase of education is preschool or nursery-school education, but as yet nursery schools are supported by only three city boards of education. The number of cities in which such schools are either housed and equipped or wholly supported by city-school systems has increased to 10 during the past year. In practically each instance these nursery schools are used as demonstration centers to inform high-school pupils, as well as teachers in the elementary-school grades, regarding child development prior to school age.

PHYSICAL EDUCATION AND SCHOOL HYGIENE

The State of Texas passed a law requiring provision for physical education in all public schools. In Illinois the physical-education law was modified so that no teacher shall be graduated from a State normal school who has not completed a year's work in physical education comprising at least one hundred and forty-four 40-minute periods of instruction.

In New York State a law was passed making it necessary for certification as school medical supervisor that besides being a graduate of an approved medical school and licensed to practice in the State the physician must have had six semester hours of post-graduate work which shall include the following subjects: (*a*) Medical examination of school children; (*b*) psychiatric problems of growth and nutrition; (*c*) preventable defects of eyes, ears, teeth, posture, etc.; (*d*) school sanitation; and (*e*) communicable-disease control. The applicant must also have had six semester hours of post-graduate work in a school or schools of education in (*a*) the principles of health education, and (*b*) organization and administration of health education in public schools.

Within the year the newly organized American Association of School Physicians held its first meeting.

The broadening of the activities of the school nurse is indicated by the publication of the outline of a course preparatory for this position prepared by Miss Short and Miss Stanley, of the National Organization of Public Health Nursing. The proposed course covers four summer terms with units for winter extension work.

Among the studies bearing on the health of the school child reported during the year was that of Doctor Sterling, of the Public Health Service, on the Physical Status of the Urban Negro. The findings show less dental decay among negroes than among white children, and that "boys and girls with the lowest intelligence quotients had the greatest number of more important physical defects." In the special study of vision of school children made by Jarman and Collins, in which a cycloplegic was used, the investigators found a high percentage of visual defects among those apparently normal by the Snellen letter test, and they recommend that "any child with symptoms of eyestrain should be sent to an eye physician for examination even if he reads 20/20 on the Snellen chart." Doctors Lokka and Hyatt have discovered that only one out of 2,250 fissures in the enamel of molar and bicusped teeth remain immune to dental decay. Studies are in progress by the Dental Association of New York City to perfect the means of prophylactic treatment of these dental defects.

Tests with the audiometer in the schools of Syracuse seem to indicate that the results of the use of this instrument with young children are rendered unreliable by a language handicap, especially where the children are from homes of the foreign born. It is suggested by the investigators that all children found defective should be retested before referring them to an aurist.

Studies of the results of health teaching in elementary schools were reported for Joliet, Ill., and for Malden, Mass., both of which indicate measurable results from a well-conducted program as compared with control classes. These results are in proportion to parent cooperation with the efforts of the school.

In physical education there has been increasing emphasis on the extension of facilities and supervision to after-school hours and to the development of such recreational interests as will lead to better use of leisure during and after school years.

Under the leadership of the bureau's special agent in schoolhouse construction an interstate school building service was established. Its present membership consists of representatives from State departments of education in 12 States.

ADULT EDUCATION

Public interest in adult education has increased during the past year. There has developed a district, county, and State consciousness as to the importance of the education of adults. California, following its practice of the past several years, held, through the cooperation of the State department of education and the University of California (at Berkeley), a conference on adult education. This conference, the one called by the Ohio State University, and the

one called by the University of Minnesota are representative of statewide meetings conducted in various parts of the country to bring together all of the agencies in the respective States interested in adult education so that a better coordinated program of these agencies might be effected.

The two meetings held by the department of adult education of the National Education Association during the year showed a decided increase of interest in adult education on the part of public-school officials and teachers. Such resolutions as the following resulted from these meetings:

That there be created in each State department of education a division of adult education and that there be appointed an efficient officer to direct the development of a state-wide program of adult education.

That there be enacted in each State legislation providing (1) that adult education be made an integral part of the public-school program of the State; (2) that the organization and maintenance of such classes be made mandatory upon local boards of school directors upon the written application of 20 or more residents above compulsory school age; (3) that adequate financial support be furnished for this work.

That there be a coordination of adult education activities within each State so as to provide cultural refinement, vocational training, and systematic schooling for all those who desire to improve themselves by further study.

It was strongly held by those in attendance at these meetings that no State can be fair to its young men and women if it provides only for those more fortunate ones who can be spared from the family support so as to attend day school.

In 1929, for the first time, the Yearbook of the Department of Superintendence of the National Education Association devoted considerable space to the program of adult education.

The American Association of Adult Education during the year has rendered most important service through its annual meeting, its magazine, and other publications by sponsoring certain studies in the adult education field and by the promotion of lecture programs.

There has been much effort in various States to teach illiterate persons, so that the 1930 census will show less illiteracy in those States. This is especially true of South Carolina, Louisiana, Alabama, New York, and the New England States.

State and national conferences have indicated in various ways that what is desired is *functional literacy*, which takes some years of work to accomplish. Instruction in most cases must be continued until the reading and writing habit becomes habitual, else little of permanent value will result.

The importance of having more definite information as to the literacy of the population has been recognized, first, by an effort to secure more detailed data in the forthcoming Federal census as to the ability of adults to read English, and, second, by the effort of various communities to collect this information independent of the Federal census. The State of Nebraska, for example, now attempts to secure information as to the education of all adults at the time it takes the regular school census.

Progress in parent education is evidenced by the better coordination of effort of educational and philanthropic agencies whose interests are centered in the education of parents in the fundamentals of child life; the appearance of a wealth of literature on child develop-

ment and parent problems resulting from the numerous researches on these subjects which have been carried on in various centers; increase in the number of study groups among parents.

A survey of preschool and parental education, containing a large body of valuable material relating to the care and training of young children and the education of parents, was issued early in 1929 by the National Society for the Study of Education in its twenty-eighth yearbook. The survey provides not only a historical setting for the present-day movement for parental education and child development but it also endeavors to make clear the underlying principles, meaning, scope, and objectives of agencies working on projects related to this field of education.

In many States provision has been made for the instruction of parents in various phases of child study. It is reported that 47 colleges and universities in connection with their summer sessions offer such instruction.

Credit or noncredit courses in the technique of organization, development, and conduct of parent-teacher associations are announced for leaders in parent groups, as well as for educators, by at least 40 institutions of higher learning for the year 1929.

Thirteen or more universities or colleges in their extension divisions offer courses for parents on subjects related to child welfare and parent education and 15 have adopted the home reading courses of the United States Bureau of Education and conduct them according to the plan of the National Committee on Home Education.

An appreciable increase is noted in the number of programs now being broadcast by radio on parent problems and child training.

In addition to the state-wide cooperative projects in parent education in operation in California and Pennsylvania, similar projects are being organized in Ohio and Michigan. The coordination of efforts of several agencies engaged in parent education or in related activities for the purpose of more effective work and better results is characteristic of these state-wide projects.

One of the outstanding needs for parent groups is that of trained leadership. How to provide lay and professional leadership to meet the demands is one of the serious considerations in this field.

Lectures, institutes, and conferences on parent problems are popular means employed for parent education. This movement has perhaps been given its greatest momentum by the organization of parent-teacher associations with a national membership in 1929 of 1,382,742. Other organizations, financed by grants from a large foundation, have made distinct contributions to the parent education movement during the year, each of which has its own unique approach to the movement. The American Home Economics Association works through schools and colleges to promote preparental education among students and supports a field service in the interest of this phase of its work; the American Association of University Women carries on a project of group study organization among the college-trained mothers in its membership, research in child welfare and parental education, and develops subject matter furnished by specialists in this field; working in cooperation with the Child Development Institute of Columbia University, the Child Study Association of America furnishes demonstration centers for some of the research activities

of the institute, organization material, and subject matter for study groups, and organizes and conducts institutes and conferences on child development.

INDUSTRIAL EDUCATION

Progress in industrial education during the past year was characterized by an expansion of the programs in both industrial-arts and vocational-industrial education, research studies dealing with objectives of courses and methods of instruction, and more adequate provisions for training industrial teachers. The tendency to include new types of courses in the programs of shop subjects was particularly noticeable. Formerly the conservatism manifested by school officials relative to the introduction of new types of courses into the curriculum of shop subjects made it exceedingly difficult to enlarge the offerings in industrial education. During the past year, however, a much more liberal attitude was shown.

An outstanding example is the introduction of courses in radio and aviation. The Essex County Vocational School for Boys, Newark, N. J., after a survey of local conditions to determine the need for trained workers in the radio industry, introduced a course in the servicing of the radio trade. Some of the larger industrial schools introduced well-organized courses in aviation for the purpose of instruction in groundwork and airplane motors. Estimates have been made which indicate that there are probably 200 public schools offering courses in some phase of aeronautics. In industrial arts, model boat building and the general shop course gained rapidly in popularity.

The demand for industrial arts teachers and the raising of the professional standards for teachers of trade subjects stimulated teacher-training institutions to enlarge and modify their work in industrial education. The State board for vocational education of Ohio developed a cooperative plan with municipal universities and other colleges for providing a systematic program for training industrial teachers in every section of the State. Under the direction of the State board for vocational education the industrial trainers offered both residence and extension courses in the regions covered by their respective colleges. In addition, the teacher trainers visited the industrial teachers in their schools and gave professional assistance in the upgrading of teachers in service. They also held regional conferences for the teachers in their jurisdiction for the purpose of promoting and improving the programs in industrial education.

The State Board of Education of California adoped new regulations governing the training and certification of industrial teachers, which became effective in September, 1928. According to these new provisions the right to make recommendations relative to credentials for a certificate to teach industrial subjects is given over to the teacher-training institutions of the State. To a large extent the responsibility for prescribing training courses also rests with these institutions. In the field of industrial arts a certificate to teach shop subjects can be obtained in only two ways, namely, by the completion of a 4-year college course or by securing a "limited credential," which is issued only to persons who have completed a high-school education,

who have had as many as five years experience in a trade, and who have completed 30 semester hours of special teacher-training work. The completion of additional courses in education is made a condition for the renewal of the "limited certificate." Standards for teachers of trade work were also raised. Vocational teachers of evening industrial classes are required to complete 36 hours of teacher training. This, however, may be completed while in service.

Research studies and experimental work dealing with the improvement of instruction, the characteristics and needs of industrial students, guidance, and placement, and objectives for courses were carried on by a number of agencies. A committee of the industrial-arts section of the American Vocational Association made a study of standards of achievement in industrial-arts courses. The New York State Department of Education carried on studies relative to continuation-school pupils. A study was made of the graduates in architectural drafting from the Philadelphia high schools to determine the number employed in the line of work for which they were trained. A State committee in California on part-time education made a study of more than 1,200 part-time students to determine mental ability and educational accomplishment. A State committee in Indiana made a study of methods of instruction in industrial subjects. A vocational school of Boston studied the reasons for school leaving of a large number of girls.

HOME-ECONOMICS EDUCATION

The State Home Economics Association of Indiana made 16 different studies, engaged in by 700 or more persons, including superintendents and principals of schools, home-economics supervisors, teacher trainers, teachers, and pupils, for the purpose of obtaining a cross-sectional picture of the homes of Indiana, the communities in which they are located, and the facilities for teaching home economics in the high schools of the State.

In accordance with the findings of these studies there were developed industrial units, class projects, and pupil activities to meet the home-economics interests and needs of the high-school pupils of the various sections of Indiana.

Likewise the home-economics committee of the West Virginia Survey of Education based its recommendations for improved home economics for that State upon data from the following sources:

(1) Replies of 167 teachers to questionnaires sent to all home-economics teachers in junior and senior high schools in the State; (2) official reports of high-school principals to the State supervisor of high schools; (3) observations of 82 home-economics lessons in various types of senior and junior high schools located in 31 counties of the State; and (4) supplementary reports of classroom instruction collected by observers.

This committee recommended, among other things, an increased home-economics enrollment and suggested to school authorities that they investigate the causes for the existing low enrollment of 34 per cent of high-school girls in home-economics classes; also that they become more interested in the home-economics curriculum, in order "that its educational values may be realized."

The home-economics course of study for the public schools of Texas was revised by a representative committee, including home economists from teacher-training institutions, secondary schools, and the State department of education. The changes especially recommended by this committee concerned child care and guidance, family and community relationships, and home economics for boys.

Increasingly, units in preparental education or child care and guidance in the home-economics program are planned in accordance with the various school levels beginning as low as the sixth grade of the junior high school and continuing through the university, with specific objectives for each group in the various educational organizations. For example, these objectives in the public schools range from: (1) Giving to pupils in the junior high school a better understanding of little children and opportunities to learn how to be of service to younger children in the home; (2) developing appreciations for the responsibilities of older members of the family to the younger ones and abilities to teach and amuse little children; and (3) acquainting them with occupational things of educational value; to "a study of the physical and mental development of the child with emphasis on the effect of heredity and environment upon social and mental habit formation" in the third and fourth years of the high school.

Progress in parental education sponsored by the home-economics program was made in many sections of the United States. The States outstanding in this progress are Texas, Oklahoma, Nebraska, New York, Kansas, Michigan, Minnesota, and South Dakota. Wisconsin has placed emphasis on a better-defined program for adult home making.

COMMERCIAL EDUCATION

The developments of the past year indicate a more general acceptance of the scientific method of curriculum making in education for business. Additional commercial occupation surveys and follow-up studies contributed data toward a fact basis for the organization of this phase of education. Analyses of stenographic, clerical, retail-selling, and executive positions made possible a better selection of content in the courses. Investigations of the difficulties of stenographers, together with certain learning and time studies, gave direction to improvements in the classroom procedure. During the year much more progress was made in applying the findings of research to the organization of the curricula than to the selection of content or improvement of instruction. Comparatively little was accomplished in constructing a program for the training of students to deal more effectively with people.

Some of the major developments in the secondary field pertain to a wider variety of offerings. Ordinarily the new courses have been organized as a result of research and are properly placed in the curriculum. In the junior high schools, there has been a general increase in the introduction of appropriate junior business-training courses. Following closely the suggestions in the report prepared at Harvard University in cooperation with the National Association of Office Managers, many schools have organized courses in office practice and machine operation. An excellent example of course of study construction for clerical practice is that conducted by the board of educa-

tion in Cleveland, Ohio. Additional courses in retail selling were organized.

Although only a comparatively small number of senior high schools organized 1-year intensive curricula in commercial subjects for seniors and graduates, the development is significant. The trend toward the upgrading of secretarial, bookkeeping, and certain other types of business positions requires better-trained workers, particularly for the upper levels of such positions. Stenographic and bookkeeping courses have been to a very large extent moved from the first two years to the last two years of the senior high school. The major demand for stenographers continued to be for the high-school graduate. There is, however, a smaller demand, but no less definite, for those who have graduated from high school and who have had some additional training for office and store positions. A large number of plans for the operation of the intensive curricula have been developed.

The colleges and universities have set forth on a program of accumulating additional pertinent facts about the requirements of initial and subsequent positions obtained by their drop-outs and graduates. Harvard University is conducting a study to determine, among other things, what factors make for success in business. The University of Michigan compiled approximately 15,000 questionnaire returns regarding the occupational histories of business and professional women. The Wharton School of Finance and Commerce of the University of Pennsylvania has distributed an excellent questionnaire to its drop-outs and graduates for an appraisal of its business curricula and personnel program. The report of Dean R. E. Heilman, School of Commerce, Northwestern University, which was presented at the 1929 meeting of the American Association of Collegiate Schools of Business, together with the report of Dr. J. O. McKinsey at the conference on higher education for business at Stanford University gives direction to the organization of collegiate business courses on a fact basis.

SCHOOL LEGISLATION

Within the fiscal year State legislative bodies were in regular session in all States except Alabama, Kentucky, Mississippi, and Virginia. Copies or digests of educational laws enacted during the year have been received by the bureau from only a few of the States. It is, therefore, impossible to give here a complete summary of the scope and tendency of such laws. The material which has been received indicates that the problem of financing education received more legislative attention than any other subject and that the tendency of recent years to increase State responsibility for the support of public education continues undiminished. For example: Indiana provided that 45 per cent of the amount collected under the 7-cent common-school levy (instead of 30 per cent as heretofore) shall be distributed as school relief money. Vermont appropriated $10,000 per annum for two years to match money privately raised for the standardization of rural-school buildings. Arkansas appropriated $750,000 for two years to be used in erecting new school buildings in natural school centers to aid in consolidating schools so that high-school advantages may be placed in reach of all the youth of the State, and provided that such aid shall be given first to communities

most in need and which levy the maximum tax permitted under the constitution and laws. Wyoming levied a school tax on "interstate common carriers" operating any motor vehicle upon the highways of the State.

The salaries of the State superintendents of Arkansas and New Jersey were increased to $5,000 and $15,000, respectively. Arkansas also increased the qualifications of the State superintendent so as to require a bachelor's degree from an approved college or university and five years' experience in public-school work immediately preceding his election.

Arkansas, Indiana, New Jersey, and Oregon took steps to aid in the consolidation of rural-school districts.

LIBRARY ACTIVITIES

Among notable developments in the library field are: Progress in the organization and administration of school library work, evidenced in the number of professionally trained school librarians and the number of school libraries with full-time instead of part-time librarians; library extension work in the education of adults; awakened interest in need for county and rural-school libraries; and the beginnings of radio broadcasting by libraries of worth-while reading, illustrated by the broadcasting of "Reading-with-a-purpose" literature of the American Library Association. Library radio activities are of three types: Reviews of adults' books, reviews of fiction, and radio story hours for children.

Two States announce new library training divisions or schools, the University of North Carolina to serve libraries in the South, and the University of Minnesota. Five other State universities are now in the field with established library divisions or schools. In the order of establishment they are: Illinois, Wisconsin, Washington, California, and Michigan. The work is primarily for the school librarian, who is now recognized as an indispensable part of the school organization. The Graduate Library School of the University of Chicago is now an established fact with one year of service to its credit.

The Carnegie Corporation of New York has announced a fund for scholarship grants to persons preparing for library work. The purpose of the grants is to enable those who have had experience in library work "with a promise of capacity to contribute to the advancement of the library profession" to pursue for a year or more study and research in library problems.

Two important library meetings were held during the year, the meeting of the American Library Association in Washington, May 13–18, 1929, and the first World Conference of Librarians and Bibliography, held at Rome and Venice, Italy, June 15–30, 1929. The first-named had an attendance of approximately 3,000, the largest assembly of library workers yet recorded. The opening meeting was addressed by the Commissioner of Education of the United States, who explained the attitude of past commissioners toward libraries and library work in the country at large and the service which the library of the bureau is able to render at the present time for the library and the teaching professions. No reports from the world conference at Rome have been received at this time. Twenty-two countries were to be represented by delegates, and 15 delegates from the American Library Association were invited to attend the conference.

Library legislation enacted during the year included the following: Mississippi provided for a State Library Commission, and bills to establish State agencies were passed in Montana, New Mexico, South Carolina, and West Virginia, the two last-named without appropriations; Illinois enacted a library law providing for library taxes to be levied in addition to all other taxes; Indiana passed a State library building bill providing for a fund of about $1,000,000 to be collected by a tax levy, and a State library building commission to be appointed by the governor for the purpose of carrying on the building project; county library legislation was enacted in Arizona, Delaware, and Tennessee, is now pending in Colorado and Oklahoma, and establishment of county libraries was provided for in 12 counties in 11 States.

Pension systems for librarians have been formulated in Milwaukee, Wis., and Worcester, Mass.

An interesting development has been noted in connection with the Julius Rosenwald Fund, Chicago, which aims to extend library service to the South through financial assistance, in an effort to meet the library needs of that section of the country. Several unique points are noted in the proposal: The requirement that designated libraries in the South shall serve the entire population, rural, urban, colored, and white; also, that local authorities will be expected to provide adequate buildings and equipment, and that the donors' contributions shall be used for books and service exclusively.

The Library of Congress continues to add to its resources and equipment by the erection of extensive blocks of stacks for the housing of the rapidly growing collection and by the gift and purchase of private libraries. Library architecture is becoming standardized and modernized, and at the same time distinctive and beautiful in design.

Interest in reading facilities for the blind is increasing, not only for the blind in general but for the students in high schools, colleges, and universities, who have increased need for textbooks in raised type. The Library of Congress reading room for the blind, various State libraries with sections for the blind, the American Foundation for the Blind, the American Red Cross, and other agencies are working to supply these needs.

II. WORK OF THE BUREAU OF EDUCATION

A. General

1. RESEARCH

(A) Studies Completed

Higher education.—(1) Self-help for college students; (2) student loan funds; (3) report on surveys of higher education for 1926–1928; (4) student expenses in State universities; (5) current statistics relating to enrollment, salaries, budgets, etc., of State teachers colleges and normal schools; (6) current statistics relating to enrollment, salaries, budgets, etc., of State universities and colleges; (7) accredited higher institutions; (8) cost of going to college; (9) statistics of land-grant colleges for the year ending June 30, 1928; (10) biennial survey of higher education for 1926–1928.

Rural education.—(1) Biennial survey of rural education; (2) staff members of State departments of education assigned to rural schools; (3) salaries and certain legal provisions relating to the county superintendency; (4) State and county financial aid for rural-school libraries; (5) State laws concerning financial support for rural-school libraries; (6) abstracts of proceedings of conference on rural-school supervision in New Orleans, La.; (7) educational achievements of 1-teacher and of larger rural schools; (8) time allotment in rural schools; (9) comparative statistics of urban and rural education; (10) statistical study of comparative educational opportunities in urban and rural communities for the United States as a whole and for four representative States; (11) study of experiments with correspondence courses and itinerant teaching; (12) salaries and salary trends of teachers in rural schools 1921–1925.

City schools.—(1) Preparation for teachers of nursery schools, kindergartens, and primary grades; (2) primer of information about kindergarten education; (3) housing and equipment of the Washington Child Research Center; (4) nursery schools in the United States; (5) progress in nursery-kindergarten-primary education, 1926–1928; (6) report cards used in kindergarten-primary grades; (7) civics and safety; (8) progress of secondary education, 1926–1928; (9) changing conceptions of the school-building problem; (10) recent movements in city school systems; (11) heads of departments in large high schools.

Physical education and school hygiene.—(1) Methods of construction and reconstruction of small rural schoolhouses; (2) sanitary care of schools for the guidance of the regular teacher; (3) physical defects of school children and what can be done about them; (4) mortality and morbidity of school children; (5) organized summer camp as a factor in education in colleges and universities; (6) review of hygiene and physical education, 1926–1928.

Adult education.—(1) Adult education activities, 1926–1928; (2) adult education as conducted under public auspices; (3) educational opportunities offered to adults in rural communities in Delaware; (4) parent education and parent-teacher associations; (5) contributions of organizations and institutions to parent education.

Industrial education.—(1) Industrial education, 1926–1928; (2) schools offering a course in occupations; (3) shop courses offered by various schools.

Home economics education.—(1) Specific contributions which home economics makes to the general education of the pupil; (2) universities, colleges, State teachers colleges, and normal schools offering home-economics instruction; (3) types of home-economics courses offered boys in the junior and senior high schools of the United States; (4) trends of home-economics education, 1926–1928.

Commercial education.—(1) Objectives of commercial subjects in the junior high schools; (2) surveys and analyses of commercial occupations; (3) commercial education, 1926–1928; (4) standards for credit in shorthand and typewriting; (5) collegiate courses in accounting, advertising, banking and finance, commercial teacher-training, insurance, journalism, merchandising, organization and management, public service and civic work, realty, secretarial training, transportation.

School legislation.—(1) Important provisions of State laws relating to free textbooks for public-school children; (2) educational bills introduced into State legislatures; (3) digest by States of 1928 educational laws; (4) survey of school legislation 1927 and 1928.

Foreign education.—(1) Important phases of education in other countries; (2) requirements for the degrees of bachelier, licence-ès-lettres, and aggregation granted by secondary schools and universities in France; (3) programs of study of the Hungarian secondary schools and complete list of the secondary schools in Hungary whose graduates are admitted without examination to Hungarian institutions of university rank; (4) outline of a course of study in foreign and comparative education; (5) higher institutions in other countries; (6) bilingual and multilingual school systems; (7) educational institutions in Egypt; (8) normal institutes in Italy; (9) student movement for peace; (10) the unity school; (11) official publications relating to education in England, Wales, Northern Ireland, Irish Free State, Scotland; (12) information about the certificates issued by the Scottish education department; (13) examinations in the University of Calcutta.

(B) Studies in Progress

Higher education.—(1) Land-grant college survey; (2) income of land-grant colleges since 1900; (3) statistics of land-grant colleges for the year ending June 30, 1929; (4) scholarships and fellowships.

Rural education.—(1) Constitution and functions of county boards of education; (2) abstracts of proceedings of conference on rural-school supervision in Des Moines, Iowa; (3) status of rural-school supervisors; (4) age-grade distribution of pupils in consolidated schools; (5) State aid for consolidation and transportation; (6) decade of progress in the consolidation of rural schools; (7) current practices in the construction of State courses of study; (8) aspects of rural-school supervision of special interest to patrons, teachers, and county superintendents in counties in which supervisory assistants are not employed; (9) actual size of the small public high schools; (10) types of administrative control in rural high schools; (11) curriculum offerings of rural high schools and their relationship to rural educational needs; (12) cooperation of county libraries with rural schools.

City schools.—(1) Supervision provided for primary grades in city schools; (2) minimum essentials for nursery schools; (3) educative value of building blocks; (4) school buildings; (5) platoon schools—buildings, costs, and educational features; (6) cycles of home life; (7) provision made in city high schools to care for individual differences of pupils; (8) selection of teachers in city school systems; (9) outline for self-surveys.

Physical education and school hygiene.—(1) Open-air and open-window rooms; (2) physical education as a required subject in teachers colleges, normal schools, and in departments of education of colleges and universities; (3) organized recess as carried on in elementary city public schools; (4) State requirements and regulations regarding the size and use of school grounds and the relationship between school authorities and recreational organizations regarding the use of these grounds.

Adult education.—(1) Types of part-time education in the United States; (2) best methods of reducing illiteracy in the United States; (3) educational opportunities offered to inmates of prisons in the United States; (4) extension activities in land-grant colleges; (5) research and instructional programs of agencies engaged in parental education; (6) organization and administration of health campaigns to prepare children for their first entrance into school; (7) status and extent of home reading and study courses and circles.

Industrial education.—(1) Organization, curricula, and staff of the industrial education work in teacher-training institutions; (2) vocational and educational guidance; (3) curriculum study in the industrial arts; (4) cooperative part-time education.

Home economics education.—(1) Methods used in building the home-economics curriculum for the elementary and secondary schools; (2) home economics in the 1-room rural schools and consolidated rural districts.

Commercial education.—(1) Part-time commercial education; (2) education for business in the land-grant colleges and universities.

School legislation.—(1) Legislation for financing education, showing sources of school funds and methods of distribution; (2) digest of laws relating to Federal subsidies for education.

Foreign education.—(1) Ministries of education in foreign countries; (2) land-grant college survey study with respect to foreign students; (3) teaching English to non-English-speaking children; (4) constitutional provisions relating to education.

2. EDUCATIONAL SURVEYS

The progress of the survey of land-grant colleges begun in July, 1927, has been very gratifying. During the past year the questionnaires not finished in 1927 were completed and sent to the institutions. The questionnaires have nearly all been filled in and returned, and the field work among the 67 institutions surveyed has been completed. Leading authorities in land-grant college education are now engaged in writing the tentative reports on the several aspects of the survey.

A comprehensive study of negro colleges and universities throughout the United States was completed by the bureau during the past year. Its purpose was to ascertain the present status of negro higher education and to recommend changes for its improvement and development. The results show great progress and an extraordinary demand among the negro people of the country for college and university education. Of the 79 institutions in the country included in the survey, 77 were found doing college work as compared with 31 institutions 10 years ago. The survey shows a gain of 550 per cent in enrollment in the negro institutions over the 10-year period, and a fourfold increase in total annual income for the same period. Notwithstanding the exceptional progress made in negro higher education the bureau found that the immediate need of the race is more education, better education, and higher education. A shortage prevails not only in number, but also in the quality of the teachers. A real need for more trained professional and technical leaders of the race, including doctors, dentists, and lawyers, is shown by the survey.

A school-building survey was made of the Mount Vernon schools, Mount Vernon, N. Y., at the request of the board of education. A 10-year building program divided into two 5-year periods, involving a cost of $3,000,000 for the first 5-year period was worked out for the school board. A bond issue of $3,000,000 for school buildings was voted upon favorably in May, 1929.

A survey was made of the junior and senior high schools of Roanoke, Va. A preliminary report was submitted, and later two representatives of the Bureau of Education conferred with the board of education and the superintendent of schools of Roanoke and with the Virginia State Department of Education regarding the recommendations contained in the report. The superintendent of schools will, before the opening of schools in September, prepare for the consideration of the board of education recommendations based upon the survey report.

Upon the invitation of the board of education of Huntington, W. Va., a survey was made of school finances in that city. The report was not completed at the close of the year, but was submitted to the board of education early in July. The expenditures for school purposes are being analyzed and compared with expenditures in other cities of comparable size.

3. CONFERENCES

Two important conferences in the field of education were called by the Secretary of the Interior during the latter part of the fiscal year. The first was devoted to the subject of education by radio and the second to the relationship which should exist between the Federal Government and education in the States.

Conference on Education by Radio

The conference on education by radio was held on May 24, 1929, in the office of the Secretary of the Interior and was attended by the following-named persons:

Ray Lyman Wilbur, Secretary of the Interior, presiding; William J. Cooper, Commissioner of Education, secretary; Ira E. Robinson and Eugene O. Sykes, members Federal Radio Commission; John W. Elwood and Everett Case, representing the National Broadcasting Co.; William S. Paley, president, Columbia Broadcasting Co.; Samuel Pickett, Columbia Broadcasting Co.; Sherwood D. Shankland, secretary department of superintendence, National Education Association; J. W. Crabtree, secretary National Education Association; C. R. Mann, director, American Council on Education; H. Robinson Shipherd, Business Training Corporation; H. Grayson Martin, representing the Western Electric Co.; Frederic William Wile; and Frank M. Russell.

The Secretary of the Interior presided over the conference which had for its objective the discussion of the use of radio in education and the determination of methods that should be established in order to make the radio more effective in education. After considerable discussion of the subject and explanation of methods that have been employed in the past, it was the sense of the conference that a com-

mission or committee be appointed to make a study of the subject and make a report thereon to the Secretary of the Interior. The advisory committee on education by radio, appointed by the Secretary consists of the following: William John Cooper (chairman), United States Commissioner of Education; Ira E. Robinson, chairman Federal Radio Commission; John L. Clifton, director of education (Ohio); Harold Stonier, educational director American Institute of Banking; William S. Paley, president Columbia Broadcasting Co.; M. L. Aylesworth, president National Broadcasting Co.; H. Robinson Shipherd, Business Training Corporation; Frank Cody, superintendent of schools, Detroit; W. W. Charters, Ohio State University; James A. Moyer, director of division of university extension, department of education (Massachusetts); George B. Zehmer, director, division of extension, University of Virginia; Will G. Chambers, Pennsylvania State College; John H. Finley, editor, New York Times; Alice Keith, director of educational department, Radio Corporation of America; Mrs. Howell Moorhead.

The advisory committee on education by radio held its first meeting in Chicago, Ill., June 13, 1929. The meeting resulted in the appointment of committees as follows: Ways and means committee, for the purpose of securing the funds necessary for the work of the advisory committee and of establishing cooperative arrangements with foundations and with the United States Bureau of Education. Fact-finding committee, to list all experiments undertaken up to the present time; to indicate the scope of radio instruction to the present time and what appeared most successful and significant; to gather all possible data and literature respecting programs, policies, methods, costs, etc.; and to outline a program which should be pursued in the future in keeping track of educational activities by means of the radio. Committee on research, to measure the results of certain programs now broadcast; to study the techniques now used in radio education and allied types of instruction; to cooperate with authorities now handling carefully outlined programs; to make suggestions to groups now experimenting with educational programs by radio. Executive committee, to supervise the work of all subcommittees, decide upon time and place of meetings of the advisory committee, correlate the work of the subcommittees, and prepare recommendations for action by the advisory committee as a whole. The chairmen of committees are as follows: Executive, William John Cooper; ways and means, John L. Clifton; fact-finding, H. Robinson Shipherd; research, W. W. Charters.

Advisory Committee on Education

On June 7, 1929, there was held in the office of the Secretary of the Interior a meeting of the advisory committee on education appointed by the Secretary for the purpose of making a study of the present relations of the National Government to education and to make recommendations as to what should be the future program of the Government in that field. Dr. C. R. Mann, director American Council on Education, was designated chairman, and Mr. J. W. Crabtree, secretary National Education Association, was designated secretary

of the committee. The other members of the committee were divided into three subcommittees as follows:

Subcommittee No. 1 (to consider educational activities of the United States Government, their present administration, what should be the future organization): James E. Russell, dean emeritus Teachers College, Columbia University, chairman; Mrs. F. P. Bagley, Boston, Mass; Lita Bane, department of home economics, University of Wisconsin; Samuel P. Capen, chancellor University of Buffalo; Walton L. Crocker, chairman educational committee, United States Chamber of Commerce; William M. Davidson, superintendent of schools, Pittsburgh; Frank P. Graves, commissioner of education, New York; Rev. George Johnson, secretary Catholic Educational Association; Lois H. Meek, secretary American Association of University Women; J. C. Merriam, president Carnegie Institution of Washington; Carl H. Milam, secretary American Library Association; R. R. Moton, president Tuskegee Institute; Belle Sherwin, president National League of Women Voters; George D. Strayer, head department of administration, Teachers College, Columbia University; W. F. Willoughby, Institute of Government Research.

Subcommittee No. 2 (to consider the subsidies of the Federal Government to Colleges, their administration, results obtained, future policies): Lotus D. Coffman, president University of Minnesota, chairman; James R. Angell, president Yale University; Harry W. Chase, president University of North Carolina; E. P. Cubberley, Leland Stanford Junior University; George H. Denny, president University of Alabama; Edward C. Elliott, president Purdue University; Mordecai Johnson, president Howard University; Uel W. Lamkin, president National Education Association and president of the Northwest Missouri State Teachers College; Cloyd H. Marvin, president George Washington University; W. P. Morgan, president Western Illinois State Teachers College; Edward A. Pace, vice chancellor of Catholic University of America; D. W. Springer, secretary Association of Governing Boards of Universities and Allied Institutions; Lida Lee Tall, Teachers College, Towson, Md.; Mary E. Woolley, president Mount Holyoke College; George F. Zook, president University of Akron.

Subcommittee No. 3 (to consider subsidies granted for education of less than college grade, how administered, results obtained, suggestions for future policy): Frank Cody, president department of superintendence, National Education Association, and superintendent of schools, Detroit, chairman; Maurice Bisgyer, secretary, National Association of Jewish Community Center Secretaries; R. L. Cooley, director Milwaukee Vocational School Committee; John W. Davis, president West Virginia Collegiate Institute; J. B. Edmonson, chairman National Committee on Research in Secondary Education; T. E. Finegan, educational director Eastman Kodak Co.; William Green, president American Federation of Labor; Mrs. L. W. Hughes, Arlington, Tenn.; Mrs. Edith B. Joynes, president department of classroom teachers, Norfolk, Va.; Charles H. Judd, director School of Education, University of Chicago, Chicago, Ill.; Mrs. S. M. N. Marrs, president National Congress of Parents and Teachers; A. B. Meredith, commissioner of education (Connecti-

cut); W. B. Munroe, Harvard University; William F. Russell, dean Teachers College, Columbia University; Agnes M. Samuelson, State superintendent of public instruction (Iowa); Guy E. Snaveley, secretary Association of Colleges and Secondary Schools of the Southern States.

At the opening session the Secretary of the Interior briefly outlined the reasons for the appointment of the committee, after which he placed the meeting in charge of the chairman of the advisory committee. Addresses on various phases of the relationship of the Federal Government to education were given by a number of members of the committee.

Meetings were held by each of the three subcommittees named above, at which plans were formulated for carrying on the work assigned to them. It is expected that some time during the fall or early winter another meeting of the advisory committee may be held to hear reports of work accomplished and to consider such recommendations as may be made at that time.

Another important conference held in Washington was the meeting on December 11 and 12, 1928, of the National Council of State Superintendents and Commissioners of Education with the Bureau of Education. Hon. Roy O. West, then Secretary of the Interior, graciously welcomed the members of the council to Washington and to the Department of the Interior. The program of the first day, which was arranged by the Acting Commissioner of Education in accordance with plans made by former Commissioner Tigert, was in charge of the Bureau of Education. The topics discussed during that day related to methods and means of securing uniform records and reports, financing of education, and ways in which the Bureau of Education can be of more service to State departments of education. The Acting Commissioner briefly introduced and discussed each of the three topics.

The subject Methods and Means of Securing Uniformity in Educational Statistics Through State Departments of Education was discussed by Hon. Agnes Samuelson, of Iowa, Hon. William John Cooper, then State superintendent of California, Mrs. Katherine M. Cook and Dr. F. M. Phillips, of the Bureau of Education, and by other representatives of State departments of education. The discussion brought out some of the difficulties in securing uniformity in statistics, such as lack of uniformity in definitions of educational terms, legislative requirements with respect to certain items in some States. As a result of the discussion of this topic the council directed the appointment of a committee to study the subject, of which committee Hon. A. D. Simpson, assistant commissioner of education, New York, is chairman.

The United States Bureau of Education as a Clearing House for Educational Information was discussed by Hon. F. G. Blair, of Illinois, Hon. W. E. Ranger, of Rhode Island, and Hon. Harris Hart, of Virginia. In his preliminary statement, Acting Commissioner Kalbach urged all State departments of education to furnish to the bureau copies of all publications issued by them. Doctor Ranger brought out the fact that the State commissioner of Rhode Island

is required by State law to furnish to the bureau such reports and statistics as may be requested by the bureau.

In presenting the topic A Nation-wide Study of Educational Finance, Acting Commissioner Kalbach submitted for discussion an outline for such a study prepared by Dr. Fletcher Harper Swift, of the University of California. This topic was discussed vigorously by Commissioner McConnell, of Minnesota, Superintendent Keith, of Pennsylvania, and others. The consensus of opinion was that such a study is needed and should be made, but that it should be entirely unbiased and undertaken by a body without preconceived conclusions; that such a study should be merely a fact-finding study, leaving it to State and local authorities to draw their own conclusions with respect to the facts ascertained.

The program for the second day was in charge of President Allen, of North Carolina. The general topic for the morning session was State School Reports to the General Assembly or to the Governor and to the People. Papers were presented by State Superintendent Keith, of Pennsylvania, on State Financial Statements; State Superintendent Allen, of Kansas, on State School Statistical Records and Reports; Commissioner Butterfield, of New Hampshire, and Superintendent Bond, of Mississippi, on State Publicity for Public Education. At the afternoon session financing public education was the topic. Under the subject State Equalization Funds and Their Distribution, Commissioner Meredith explained the Connecticut plan, Superintendent Callahan, the Wisconsin plan, and Superintendent Cook, the Maryland plan. Other forms of State aids and subsidies were explained by Superintendents Cooper, of California, and Samuelson, of Iowa. The evening session was devoted to the consideration of possible ways of extending the public-school program. Superintendent Tidwell, of Alabama, discussed new sources of State school revenue to supplement those already available and Superintendent Blair, of Illinois, and Commissioner McConnell, of Minnesota, discussed the extension of the school program through possible economies in the present program.

Thirty-four States, the District of Columbia, and the Bureau of Education were represented at the conference by 54 persons. The meetings were well attended and seemed so worth while that the council voted to hold meetings each alternate years with the Bureau of Education in Washington.

A conference called by the Secretary of the Interior, February 10, 1929, and participated in by members of the House and Senate appropriations committees, officers of Howard University, and members of the staff of the Bureau of Education was held for the purpose of discussing future relationships of the Federal Government to Howard University. Since, a series of conferences have been held in the Bureau of Education to prepare a plan for a 20-year program of development for Howard University.

The following conferences were called by the Commissioner of Education:

Conference of State and county supervisors of rural education of the Southern States held at New Orleans, La., December, 1928.

Conference of State and county supervisors of rural schools of the Midwestern States held at Des Moines, Iowa, June, 1929.

4. COOPERATIVE UNDERTAKINGS

Whenever it is possible to do so, the bureau cooperates with other educational organizations in the solution of educational problems and in the promotion generally of education. Among the cooperative projects during the year are the following:

A study of the county superintendency in the United States in cooperation with the department of rural education, Cornell University, and a study of schools and classes for crippled children with Mr. A. O. Heck, Ohio State University.

Collection and preparation of exhibit material for a conference on American Education at Mainz, Germany, in cooperation with the International Institute of Teachers College.

Advisory service and assistance in preparing conference programs on various phases of rural education to the following organizations: Southern Women's Educational Alliance; American Association of University Women; International Federation of Home and School; Rural Life Bureau of the National Congress of Parents and Teachers.

Membership on committee responsible for preparation of material on rural education for the 1931 Yearbook of the National Society for the Study of Education.

Advisory service to the Indian Bureau concerning education of the Indians, including membership on a departmental committee and preparation of a report of recommendations for procedure.

Advisory service to committee responsible for survey of education in Vermont.

Study of certain aspects of elementary teachers' meetings in the Southern States in cooperation with a committee appointed by the members of the conference on rural school supervision held in Raleigh, N. C., 1926.

Study of the rural school principalship in cooperation with a committee appointed by the 1928 New Orleans conference of State and local supervisors of rural education of the Southern States.

Cooperation with the agricultural committee of the national fire waste council, United States Chamber of Commerce, in an investigation of problems related to rural fire hazards and function of the rural school in guarding against fire loss; assisted in compilation of a book to be issued by that committee on Farm Fires and Farm Fire Prevention.

The Bureau of Education in cooperation with three business officers' associations has undertaken the formation of a national committee of the business officers of higher educational institutions to develop improved methods of making financial and other reports so that the important elements of these reports may be made comparable with a fair degree of reliability.

The Bureau of Education, acting in an advisory capacity with the Board of Education of the District of Columbia, assisted in the formulation of the inquiries to be used to determine the basis for licensing degree-granting institutions in the District of Columbia.

Cooperated with the National Congress of Parents and Teachers in organizing and conducting a conference of State chairmen of home education of that organization, held on May 9, 1929, in Washington.

Planned the programs for the second national conference of the Organization of Supervisors and Teachers of Home Economics, held in Cleveland, Ohio, February 25–26, 1929, and for the home economics section of the Eastern Arts Association in New York City, April 2–5, 1929.

Continued cooperation with the Department of Justice in planning educational programs for Federal penal and correctional institutions and made several visits to the United States Penitentiary at Leavenworth, Kans., to study the needs of prisoners and to assist in the installation of an educational program.

Cooperated with local, State, and national organizations interested in reducing illiteracy and with the American Library Association, National University Extension Association, and National Congress of Parents and Teachers in home reading courses.

Cooperated with the American Association for Adult Education and with committees of the department of adult education of the National Education Association in matters pertaining to adult education.

Cooperated with the Carnegie Institute of Technology in conducting a conference on industrial education.

Continued cooperation with the National Congress of Parents and Teachers in the campaign to prepare children for their first entrance into school.

Cooperated with the State Home Economics Association of West Virginia in outlining present trends in home-economics education and with the General Federation of Women's Clubs in checking the results of its survey of home economics.

Cooperated with various institutions of higher education in the United States in the evaluation of credits from foreign institutions.

In cooperation with the National Association for the Study of the Platoon or Work-Study-Play Organization, held a series of committee conferences on different phases of the platoon plan at Cleveland, Ohio, in February, 1929.

Cooperation was continued in the work of the Washington Child Research Center, the National Education Association, National Committee on Nursery Schools, and National Committee on Research in Secondary Education.

The cooperative survey with the Division of Venereal Diseases of the Public Health Service of the teaching of sex hygiene in high schools was completed and published by the Public Health Service.

5. MISCELLANEOUS

The credentials of 481 foreign students from 57 different countries were evaluated and a number of cases reviewed.

Translations were made for the bureau of educational material from 22 different languages, a total of 162,916 words, and translations made for other governmental agencies consumed the equivalent of the time of one person for more than 20 days.

Numerous articles on various phases of education were prepared by members of the staff for issuance in educational periodicals.

B. Library

During nine months of the year, the library division was without a librarian. An assistant educationist, who had been appointed temporarily to assist in the collecting and editing of material for the Bibliography of Research Studies in Education, left the service in June, 1928. With this decrease in staff, the task of maintaining the regular work of the division and carrying on the new research undertaking has been arduous.

Two important bulletins were completed and issued during the year, namely, Bulletin, 1928, No. 22, Bibliography of Research Studies in Education, 1926–1927, with 162 pages; and Bulletin, 1928, No. 23, Record of Current Educational Publications, 1927, with 116 pages. Both of these bulletins were furnished with annotations, and index to authors and subjects and cross references.

In addition the manuscript of the Record of Current Educational Publications for the year 1928 was prepared and sent to the printer. This comprised one bulletin only, with more pages than usual, with annotations and index to authors and subjects and cross references. It is planned to issue the Record of Current Educational Publications in the future at more frequent periods, probably every two months, and to furnish an annual index for the entire calendar year in the last number. The manuscript for a second annual Bibliography of Research Studies in Education covering studies made in 1928–29 has been completed. Library Leaflet No. 36, List of References on Vocational Guidance, was prepared and sent to the printer, and a bibliography on Higher Education was prepared.

The library cooperated with various other Government and private organizations in book-lending; with the Washington Child Research Center in the loan of a large number of volumes on child study for use at their headquarters; by interlibrary loans to a number of libraries and institutions of higher education, including foreign and domestic material for the use of graduate students; and by loans to teachers and school executives both inside and outside of Washington. The material of the library was also placed at the service of graduate students in education who came to Washington from various parts of the United States for the purpose of using the bureau library.

The bibliographical service assumed larger proportions during the year owing to the increasing demand for bibliographies on educational subjects, and large numbers were sent out by mail and given to personal inquirers.

The division also collected, classified, and catalogued a great many books, periodicals, proceedings, reports, etc., domestic and foreign, as well as made substantial additions to the textbook collection. Current catalogues and reports of presidents and treasurers of colleges, universities, and professional schools were collected. The library maintains a permanent file of catalogues of all the institutions of higher education, which has been made as complete

as possible, and is very helpful to persons making studies of the early history of these institutions.

The division handled a large amount of correspondence, the reference section furnishing information in reply to letters, telegrams, telephone messages, and to personal inquirers. It continued cooperation with the Library of Congress by furnishing copy for printed catalogue cards for educational publications in the series supplied by the card division of that library.

C. Publications

The whole number of documents printed in the year ended June 30, 1929, was 75, of which 47 were bulletins, 7 leaflets and circulars, 1 report of the Commissioner of Education, 10 numbers of School Life, 8 numbers of the Clip Sheet, and 2 miscellaneous publications. Of the bulletins issued, 13 were chapters for the Biennial Survey of Education.

The Clip Sheet, which was issued monthly for several years and was devoted to current news items regarding education, was discontinued during the year.

The allotment of funds for printing was $2,500 more than in 1928, and the total output of printed matter was greater by seven documents than in the previous year. Twenty-eight manuscripts were in the files of the editorial division awaiting publication at the end of the year owing to the lack of funds available for printing.

D. Alaska

Through its Alaska Division, the Bureau of Education maintains schools, furnishes medical relief, supervises the reindeer industry, and provides assistance generally for the aboriginal races in the widely varying regions of Alaska.

The 27,000 Eskimos, Aleuts, Athabascans, and Thlingets are scattered along thousands of miles of coast from the southernmost boundary to the northernmost cape, and on the great rivers, in villages varying from 30 or 40 to 300 or 400 persons. To some of the settlements on the shores of the frozen ocean or on remote islands the annual visit of the bureau's vessel, the *Boxer*, furnishes their only means of communication with the rest of the world. In many instances the school is the only elevating influence in the village.

From the nature of things, the teacher in an Alaskan native school must widen the scope of his activities beyond the schoolroom. Of necessity he assumes the functions of a community leader, an arbitrator in disputes, a censor of morals, a preserver of the peace, and a public nurse and medical adviser. He must have the courage and resourcefulness successfully to cope with all manner of emergencies. He must face the problems of ignorance, superstition, immorality, and sometimes of hunger and pestilence.

The personnel of the Alaska Division of the bureau during the fiscal year 1928–29 included three employees in the Washington, D. C., office, and six employees in the Seattle, Wash., office, which is the headquarters of the Chief of the Alaska Division and functions as the purchasing and disbursing office for the bureau's Alaskan work. The field force in Alaska included 6 superintendents, 181

teachers, 9 physicians, 29 nurses, 3 employees in connection with the reindeer service, 19 employees on the U. S. S. *Boxer* and on the Yukon River medical boat; also 26 cooks, janitors, and orderlies, a total of 282 employees. Ninety-three schools were maintained with an enrollment of 3,660.

In all of the day schools instruction in some form of industrial work is given, principally in cooking and sewing to the girls and in carpentry to the boys. When no other place is available cooking is often taught in the teacher's own kitchen. By purchasing groceries and other supplies at the local stores the natives frequently supplement the materials furnished by the Bureau of Education. In this way the domestic-science work at some of the day schools has become practically self-supporting.

To give specialized training in industries for which the day schools are not equipped, industrial boarding schools are in operation at White Mountain, on Seward Peninsula; at Kanakanak, on Bristol Bay; and at Eklutna, on the Alaska Railroad, north of Anchorage. To White Mountain are sent Eskimo boys and girls from the villages on the northwestern coast as far as Point Barrow. Kanakanak is the center for vocational training for the Aleuts and for the Eskimos of southwestern Alaska. The Alaska Railroad makes Eklutna readily accessible for pupils from central Alaska and from the upper Yukon region.

The curriculum of these schools includes such industries as will improve the living conditions of the natives and afford them assured means of support. Instruction is given in carpentry, house building, furniture making, cooking, bread baking, sewing, the making of clothing, boat building, sled construction, the operation and repair of gas engines, the making of snowshoes, the tanning of skins, taxidermy, the carving of wood and ivory, blanket making, and basket weaving. To train the natives for effective service in their cooperative stores, instruction is also given in typewriting, stenography, clerical work, and business methods.

Centuries of experience in the use of tools of their own contrivance has developed in the native races of Alaska mechanical skill of a high order, which they successfully apply in the various industries taught in the schools.

The Bureau of Education encourages the establishment in native villages of cooperative mercantile stores, financed by native capital and conducted by the natives themselves, with the advice of the teachers of the local schools. In no other way can the natives so readily acquire self-confidence and experience in business affairs. Such cooperative enterprises are now in successful operation in 17 villages in various parts of the Territory.

Availing themselves of the annual visit of the bureau's supply ship *Boxer* and of the parcel-post service, many natives send to the office in Seattle packages of furs, fur clothing, carved ivory, baskets, and rugs, which are sold for them through the Seattle Fur Sales Agency. The proceeds of all sales are sent to the individual natives, applied to the settlement of their accounts with the Seattle merchants, or placed to their credit in savings banks, as requested, and detailed accounts are rendered of all transactions. The captain of the *Boxer* annually delivers to settlements along the Arctic coast

many tons of food supplies, packages of clothing, furniture, and building materials purchased with the proceeds of the sale of furs and other commodities sent out by the Eskimos during the previous summer.

The Government's duty to care for the health of the aboriginal races of Alaska is performed by the Bureau of Education through its Alaska Division. Among the natives hereditary diseases are much in evidence. Tuberculosis in its various forms, pneumonia, and trachoma are very prevalent. Epidemics of smallpox, influenza, and measles have frequently taken their toll of hundreds of lives.

For the medical relief of the natives the Bureau of Education employs 9 physicians and 29 nurses. It maintains hospitals at Juneau, Tanana, Akiak, Kanakanak, and Kotzebue. Each hospital is a center of medical relief for a very wide territory, and each physician makes extended tours through his district. The hospitals, physicians, and nurses serve only the more thickly populated districts. In the vast outlying areas the teachers must, of necessity, extend medical aid to the best of their ability. Accordingly, the teachers in settlements where the services of a physician or nurse are not available are supplied with simple remedies and instructions for their use.

The bureau's medical work is supplemented by contracts with hospitals at Anchorage, Nome, Cordova, Wrangell, and Fairbanks, in Alaska; with the Children's Orthopedic Hospital, Firlands Sanatorium, and Riverton Sanatorium, in Seattle. In a few instances, the services of specialists in Seattle have been secured for diagnosis and the treatment of diseases of the eye, ear, and nose.

To natives and white men scattered along thousands of miles of the Yukon River and its tributaries the Bureau of Education's Yukon medical boat furnishes the only means of securing medical and dental relief. Each year, in a cruise during June, July, August, and September, and extending as far as the Yukon delta, the services of the physician, the two nurses, and the dentist on this boat are in constant demand at each stopping place. The work includes distribution of medicines with instructions for their use, extending first aid, instructions regarding the care of the sick, advice concerning the care and feeding of children, performing such operations as can be attended to on the boat, extracting and filling teeth, and the transportation of a limited number of patients to the hospitals at Tanana and Fairbanks. During the season of 1928, 1,473 patients were treated, and much dental work accomplished, including 884 extractions.

Originating in 1892 in the importation by the Bureau of Education of reindeer from Siberia to furnish means of subsistence and material for clothing for the Eskimos in the neighborhood of Bering Strait, who were in danger of exhausting their precarious food supply, the reindeer industry has long been of chief importance in the bureau's activities in behalf of the natives of northern and western Alaska. From the original importations, totaling 1,280 in the decade between 1892 to 1902, the reindeer have rapidly increased to the present great herds of hundreds of thousands. Year after year reindeer were transferred from one native village to another, until practically all of the settlements in the region suited to the

raising of reindeer have been supplied, and the problem is to find a market for the surplus meat and hides.

In order to interest the natives in reindeer raising and to encourage them, the reindeer were distributed among them through a system of apprenticeship; the result is a large number of individual owners. In 15 localities native owners of reindeer have combined their herds and formed cooperative associations, thus insuring better safeguarding of their interests, more efficient methods for the sale of meat and hides, economy in the herding, and simplification of the marking of the reindeer, one mark for the entire association being substituted for the large number of marks of the individual owners. These cooperative associations own approximately 160,000 reindeer.

As part of their duty, the teachers in the Bureau of Education's schools in those regions affected by the reindeer industry have hitherto been required to exercise supervision over the herds in the vicinity of their schools. The growth and importance of the industry have necessitated the appointment of a general supervisor whose duties cover all matters connected with the reindeer service, including the inspection of the herds, the establishment of new herds, the making of recommendations for the issuing of leases for grazing areas, cooperation in the prevention of disease, promoting the marketing of the meat and hides, and furthering all other measures for the advancement of the industry.

The growth of the reindeer industry rendered it urgent that provision be made for the allotment of grazing lands. By the act of March 4, 1927, authority was granted for the establishment by the Secretary of the Interior of grazing districts in Alaska and for the granting of leases for definitely described areas therein. The provisions of this act are being carried into effect as rapidly as possible by the General Land Office, with the cooperation of the Bureau of Education's supervisor of the reindeer service. This action will regulate the occupancy of grazing lands by the reindeer herds and prevent friction among the owners of reindeer in regions where the herds are most numerous.

With the great increase in the number of reindeer and the entrance of white men into the industry, the need for scientific attention became apparent, resulting in the assignment by Congress to the Bureau of Biological Survey of the duty of making investigations in connection with the diseases and parasites affecting the reindeer; breeding, feeding, and management practices, and the grazing resources of the Territory.

In view of the fact that large numbers of reindeer are killed for food locally and for exportation, it is difficult to state the precise number in Alaska at any given date. According to a statement submitted by the general supervisor of the Alaska reindeer service, the total number in Alaska June 30, 1929, was 599,825.

Based on a preliminary survey of the grazing areas of Alaska suitable for reindeer production in 1921, it was estimated that between 3,000,000 and 4,000,000 reindeer could be supported on the 150,000 to 200,000 square miles of open grazing lands, from which 1,000,000 or more animals would be available annually for slaughter. Later investigations have shown that approximately 350,000 square miles of the territory are of value for grazing. This enlarged area

found suitable for grazing use should be able ultimately to support a considerably larger number of reindeer with a correspondingly increased number available for slaughter. The greater part of this area is in the treeless tundra bordering the Bering Sea and the Arctic coast.

The greatest problem in connection with the reindeer industry is the providing of a market for the surplus meat, which is greatly in excess of local demands. Hitherto exportation has been confined to the remote northwestern region, from which shipments can be made only during the summer months when those northern waters are free from ice. During the year 1928 approximately 16,000 reindeer carcasses were shipped out of Alaska. On the untimbered slopes of the region tributary to the Alaska Railroad there are unlimited grazing grounds for reindeer. A plan is being worked out that provides for driving herds of reindeer to this pasturage, where the animals will grow fat. When in prime condition, reindeer will be butchered and the carcasses stored in a refrigerating plant at Seward, from which shipments to the States can be made at any time of the year. A supply of meat can thus be established, its exportation stabilized, and a steady market created.

An interdepartmental committee of representatives of the Department of the Interior and of the Department of Agriculture has been appointed to consider problems in connection with the reindeer industry. The first action of this committee was to issue a statement in order to make clear to State and municipal health officers, to conservation and game commissioners, and to the public, that reindeer meat may be received into the United States and shipped interstate without inspection. No contagious disease has ever been encountered, and no reason has appeared why the sale of reindeer meat should require Federal, State, or municipal inspection for the detection of disease. However, State or municipal inspection of reindeer meat may be made when desirable to determine whether the meat may have been spoiled, due to improper storage or handling. For identification purposes the committee has prescribed a tag and an ink brand to be affixed to and placed upon the carcass of each reindeer to be shipped out of Alaska.

In northern and western Alaska there is a striking contrast between conditions in the villages where the bureau's work has been established and in those settlements where the natives are still in their primitive state. There are villages out on the tundra and along the coast of Bering Sea and the Arctic Ocean where the natives live in small sod houses, partly underground, to which access is gained through a low tunnel. In many cases, the only heat is that thrown off by the bodies of the occupants. The light filters through the window of seal intestines in the roof; the floors are indescribably filthy with litter and refuse. In mild weather these sod houses are wet from seepage and from moisture dripping from the roof and walls. The natives living in these hovels are dressed in parkas made of the skins of wild ducks, sealskin trousers, and boots of fishskins or sealskins. In summer they live on the flesh and eggs of wild birds and a few seal and salmon. In winter they depend for food upon fish which they catch through holes in the ice. These people live from hand to mouth and have no desire to better their conditions.

In villages where teachers have been stationed for a number of years there are well-constructed, 2-story log or frame houses, with linoleum on the floors, paper on the wall, and containing ranges, heaters, comfortable beds, and good furniture. These natives have on hand supplies of dried fish and reindeer meat, wild berries, and sometimes vegetables grown in their own gardens. They have a stock of wood for winter use, and from their reindeer herds they can secure meat for their own use and for sale, also skins for clothing.

In southeastern Alaska, where the natives have had the benefit of schools and missions for very many years, conditions in some of the native villages compare favorably with those in the white settlements.

Organized air routes in Alaska are solving the problem of swift communication between distant points. Airplanes are now used by the bureau's superintendents in visiting the scattered villages and in reaching the reindeer on distant grazing lands, enabling them to accomplish in a few hours journeys that on foot or with dog sleds or boats would require many days of arduous travel. In emergencies airplanes have furnished rapid means of transportation for physicians, nurses, or patients.

The radio service operated in Alaska by the War and Navy Departments has materially aided the bureau's work. Emergency calls by radio for the services of a physician or nurse, requests for medicines or for advice as to treatment, have time and again resulted in the relief of illness or the saving of life. Important administrative messages are promptly forwarded by radio to their destinations. The use of the radio has mitigated the life of the teachers in many of the isolated villages, bringing them into instantaneous touch with the rest of the world.

Educational statistics for the school year ending June 30, 1929

Total number of days in actual attendance	381,638.5
Total number of pupils enrolled during the year	3,660
Average daily attendance throughout the year	2,588.31
Average number in schoolroom each day	29.64
Total number of schools open	93
Total number of schoolrooms open	159
Average number of days in school year	142.83
During the year there was spent for repairs on the school buildings and not counted as a part of the operation of the school	$17,500.00
Spent for new buildings	$45,075.96

Community service by teachers

District	Visits made to homes	Medical assistance rendered	Number births reported	Number deaths reported	Native population	Number of teachers reporting
Central	3,199	5,333	54	42	1,833	32
Northwestern	2,316	4,428	74	36	2,177	21
Seward Peninsula	2,443	3,433	45	23	2,191	31
Southeastern	2,526	3,919	50	48	4,330	39
Southwestern	1,872	3,022	34	39	896	30
Western	3,889	8,046	64	54	1,719	29
Total	16,245	28,181	321	242	13,146	181

Medical service by nurses and physicians

	Nurses	Physicians	Total
Number of visits to homes	10,618	455	11,073
Number of patients treated	15,015	8,690	23,705
Number of treatments given	32,656	34,309	66,965
Number of births reported	144	63	207
Number of deaths reported	83	62	145
Total days of hospital care	2,522	17,477	19,999
Out and clinic patients	9,062	6,982	16,044
Out and clinic calls	11,729	16,508	28,237

Reindeer in Alaska, June 30, 1929, showing ownership; reported by the general supervisor of the Alaska reindeer service

	Lapps	Government	Natives	Whites	Total
Central district			2,529	5,475	8,004
Western district	27,422	5,817	55,945	31,875	121,059
Southwestern district		1,253	15,206	93	16,552
Seward Peninsula district	12,000	2,324	129,195	53,500	197,019
Northwestern district	17		157,174	100,000	257,191
Total reindeer in Alaska	39,439	9,394	360,049	190,943	599,825

E. Howard University

An act of Congress approved December 13, 1928, authorizes annual appropriations to aid in the instruction, development, improvement, and maintenance of Howard University, and requires an annual report by the Office of Education concerning the affairs of the university. In order to determine the nature of the annual report that would be most useful to the Congress, the Secretary of the Interior called a conference of subcommittees of the committees on appropriations of the Senate and the House of Representatives, to which a representative of the Director of the Budget, the chief of the division of higher education of this office, and officers of Howard University were invited. Discussion made it evident that it was the desire of the congressional committees and of the Bureau of the Budget that an initial report be made which would outline a plan for the development of Howard University extending over a period of from 15 to 20 years. It was indicated that this plan should, first, suggest an educational program adequate to meet the needs of the negro people for a university of the highest type; second, estimate the probable growth in attendance in the various fields of work offered; third, provide for a plant adequate to care for the program suggested and the student growth estimated; and fourth, suggest a plan for the division of the financial burden involved between Congress and the private board of trustees of the university.

The chief of the division of higher education, representing the Office of Education, was directed by the Secretary of the Interior to make such a study in cooperation with the officers of Howard University.

In accordance with this direction, the chief of the division of higher education invited the president and other officers of Howard

University to meet with him and to constitute a committee to collect the data required for a study of the kind desired. At the initial meeting of the committee the following tentative proposals were laid down as guides to procedure and collection of the necessary data:

1. That an educational and financial program should be developed which in five years would make the institution the equal of any university of its size in the United States. Corollary to this proposal it was agreed that during this period the institution should limit the growth of its student body to the point necessary to provide educational units of efficient and economical size.

2. That the plan should contemplate assumption by the Federal Government of the major responsibility for the development of the plant to provide for this minimum student body during the 5-year period, with the exception that services that might be made self-supporting, such as laundry and dining halls, should be developed from earnings or private gifts.

3. That an attempt be made to suggest a schedule of Federal assistance which, apart from the program for physical plant, would at the end of the 5-year period decrease from year to year until at the end of 10 years a minimum annual sum would be provided by Congress. The actual amount of Federal assistance and the proportion of the total annual budget of the university thus provided would decrease during the sixth, seventh, eighth, ninth, and tenth years. Thereafter the amount would remain constant but the proportion would with normal expectancy of growth, decrease.

At subsequent meetings of the committee, upon the basis of data studied, it was agreed that the university should consist of the following units: 1. School of Medicine (medicine, dentistry, pharmacy). 2. School of Law. 3. School of Religion.[1] 4. College of Liberal Arts. 5. College of Education. 6. College of Applied Science (to become College of Engineering at end of fifth year). 7. School of Music (to become College of Fine Arts at end of fifth year). 8. Division of Summer School. 9. Extension Service. 10. Graduate and Research.

Various methods of predicting growth in student attendance were used. All showed a probability of increase in size of the student body beyond what seemed practicable, from the standpoint of expense, to the chief of the division of higher education and the officers of Howard University. It was therefore determined to limit growth during the period of development to present attendance, except in those cases in which plant necessary for efficient instruction and staff required to carry on teaching would be more effectively and economically utilized with larger student attendance. A further exception was made in the case of the College of Education which, because of the urgent need for training negro teachers on a high level, was allowed a growth of approximately 50 per cent over present enrollment. The following table indicates the present size of units and the limitation proposed as the maximum during the next two 5-year periods.

[1] No Federal funds to be applied to this school.

Average enrollment

Units	1928–29	1933–34	1938–39
1	370	456	620
2	88	140	200
3	(1)	(1)	(1)
4	659	720	1,000
5	456	720	1,150
6	61	140	120
7	49	120	270
8	[2] 402	[2] 945	[2] 2,070
	[3] 134	[3] 315	[3] 690
9	10	190	504
10	[2] 195	[2] 336	[2] 480
	[3] 98	[3] 168	[3] 240
Total	[2] 2,122	[2] 3,321	[2] 5,566
	[3] 1,854	[3] 2,691	[3] 4,186

[1] Omitted from estimates.
[2] Number of individuals.
[3] Number of individuals reduced to equivalent in terms of full-time students.

The second step in the estimate was to prepare plans and estimates for the expansion of the physical plant to accommodate the maximum number under the limited enrollment suggested. A summary of these estimates follows: For purchase of land, $1,386,500; for building construction, including remodeling, $13,431,000. The latter figure is based on a schedule of projects giving proposed order of construction and estimated cost for each project.

The quality of instruction will be determined in large part by the quality and size of the staff, which in turn will be determined in large part by salary scales, size of student body in the various units, and by the availability of competent persons to carry on instruction. The salary scale adopted, the distribution of academic rank proposed, and the total number upon the staff were determined upon the basis of standard practice in reputable institutions accredited by the professional accrediting bodies.

The following table summarizes tentative proposals with reference to these matters:

Rank	Number in each rank [1]	Salary range
Professors	108	$4,000–$6,000
Associate professors	25	3,000– 3,900
Assistant professors	44	2,300– 3,200
Instructors	80	1,600– 2,500
Total staff	257	

[1] Number of individuals reduced to equivalent of full-time persons.

Because of the condition of higher education for negroes in the United States, the problem of securing competent personnel is a special one. Higher institutions find it necessary, in order to maintain a qualified instructing staff, that opportunity be given for further study and self-improvement, and for investigation and research on the part of those competent to carry on work of this kind. In other words, the institution that fails to provide opportunity for study and research on the part of its staff will lose to institutions which make such provision the most able members of the

staff, even though academic rank and salaries may be no greater. Tentative estimates were therefore made which would enable the university to set up a program to encourage self-improvement on the part of its staff and to undertake research in the fields immediately concerned with the peculiar problems of a university of the kind contemplated.

The committee is now engaged upon a study of the basis for a proposed distribution between the Congress and the private board of the expense involved in this program. This requires careful study of the present endowment, student fees, and other sources of income, and of the possibility of increasing the funds received from private sources. Further, it is necessary to estimate the relationship that the funds that may be secured from private sources bears to the total requirements.

When tentative proposals in this respect have been developed it will be necessary to review the various elements of estimate indicated above. The basic data and calculations on which these estimates have so far been assembled are available in the Office of Education but are not submitted with this report since the relationships of the various portions must be determined and articulated with reference to the entire problem. It is probable that modifications of the initial estimates and calculations will result after each of the elements has been developed in isolation.

In order to meet the desire of the subcommittees of the appropriation committees of the Senate and the House of Representatives, and of the Director of the Budget, that a plan be prepared for division of the burden of financial responsibility between the Congress and the private board of trustees, it is necessary that the entire suggested program be drafted and submitted to the trustees of the university. Since it is a purpose of this study to suggest a plan which involves the Congress on one hand and the private board of trustees on the other, the responsibility of the Office of Education in making this report to Congress can be discharged only with reference to the willingness of the board of trustees to assume a proper share of the burden. It is the belief of the Office of Education, as the result of various discussions with Howard University authorities, that practical suggestions for division of responsibility may be devised which will be acceptable to the board of trustees and which will not appear overburdensome to the Federal authorities.

F. Additional Duties

Under the provisions of an act of Congress, approved December 13, 1928, Howard University, located in Washington, D. C., "shall at all times be open to inspection by the Bureau of Education and shall be inspected by said bureau at least once each year. An annual report making a full exhibit of the affairs of the university shall be presented to Congress each year in the report of the Bureau of Education."

The act of Congress entitled "An act to regulate the practice of the healing art to protect the public health in the District of Columbia," approved February 27, 1929, created a commission on licensure to practice the healing art in the District of Columbia and designated the Commissioner of Education as a member of the commission.

An act of Congress approved March 2, 1929, with respect to the licensing of degree-granting institutions in the District of Columbia charges the Board of Education of the District of Columbia with the duty of licensing such institutions, but makes it the duty of all public officers and bureaus of the Federal Government concerned with educational matters to render such advice and assistance to the board of education as may be considered necessary or desirable. Such assistance has been requested of this bureau by the Board of Education and assistance in the performance of its duties has been rendered.

With the approval of the Secretary of the Interior, plans are in process of formulation for the inauguration of correspondence courses of study for the benefit of the children living on Army, Navy, lighthouse, or other Federal reservations where schooling facilities are not available. If desired by school officials of States, it is intended that such courses will be made available for the instruction of children in isolated communities, especially in communities where the small number of children of school age makes its inadvisable to establish regular schools. Toward the close of the year a member of the bureau's staff visited Toronto and Winnipeg, Canada, with a view to securing information regarding the conduct of correspondence courses as carried on in Canada. It is hoped that this work may be inaugurated during the fall of 1929.

G. Recommendations

During the six and a half months which have passed since the undersigned became Commissioner of Education he has given serious consideration to three major issues:

First. Plans for a nation-wide survey of secondary education for which Congress has authorized the expenditure of $50,000 during the current fiscal year, and $100,000 and $75,000 in the two succeeding years, respectively.

Second. A reorganization of the personnel of the Bureau of Education with a view to carrying out in the most effective way the purposes for which the Office of Education in the Department of the Interior was created, and to answer in some small measure new demands which appear to be proper functions for the bureau to perform.

Third. The effectiveness of our work in Alaska and the reorganization of a type that will meet present needs and in so far as possible relieve the Commissioner of Education of administrative responsibilities.

The following general recommendations are respectively submitted for your consideration:

I. With regard to the survey of secondary education—

A. The Commissioner of Education should personally serve as general director of the survey. This is the advice which has been given by numerous authorities in secondary education, especially those who were active in urging Congress to provide for this nation-wide study.

B. A consulting committee of persons especially expert in the field of secondary education and in the technique of survey work, consisting of some seven or nine, should be appointed and should meet at the call of the director. During the first year meetings will

be rather frequent. These persons should receive their necessary travel expenses. Their time will doubtless be furnished by the institutions which they serve regularly.

C. An expert in the field of secondary education who has had experience in surveys should be employed for two or three months at the beginning of the study and again for a similar period near its close. He should be available to come to Washington for consultations from time to time in the interim.

II. The reorganization of the work of the Bureau of Education.

The Office of Education was created for the particular purpose of ascertaining facts about education in the United States, organizing and disseminating these data, and conducting researches of value to American schools and colleges. This work has been admirably done over a long period of years in spite of the fact that the office has never been provided with an adequate staff of specialists to do all the work which the public and the profession have expected of it. During the last few years funds have been provided for small additions to the staff. These additions have frequently been made upon demand of organized groups of educators. In spite of many merits which this system has, it appears to me to have certain disadvantages which ought not to be overlooked, among them the following:

A. It encourages organized groups to become active in demanding service of the bureau and the addition of specialists to render this service; to look upon these specialists, once appointed, as the peculiar agents and perhaps even propagandists of the interests of such groups.

B. It encourages other groups to organize and urge appointment of representatives of their interest to the bureau staff.

C. It tends to develop a personnel in the Bureau of Education which reflects current organization in the school world rather than an organization designed to carry out the specific purposes for which the Bureau of Education exists.

1. A new organization: The first step in the development of a new organization has been already taken by the Secretary of the Interior. The Personnel Classification Board, upon the presentation of facts by you has reclassified the office of commissioner and created the office of assistant commissioner. And the first appointee to this assistant commissionership is expected to report for duty on October 1, 1929. At that time the Commissioner of Education, in consultation with the Assistant Commissioner and the staff of division chiefs in the bureau will recommend to you a new administrative organization.

2. Two other positions of very great importance to the work of the Bureau of Education should be reclassified. These are, the librarian and the editor-in-chief. Doctor Wolcott resigned the librarianship on September 30, 1928, to accept service at a higher remuneration with the Library of Congress. When the undersigned became Commissioner of Education he asked the Civil Service Commission for a list of eligibles. In his judgment none of the persons on the list seemed to possess educational background and professional training adequate to the work which the librarian in this office should undertake. Unless the United States Government is in a position to pay a salary

ranging from approximately $4,500 to approximately $6,000, it is unlikely that we can successfully compete with college libraries for persons adequately trained to do the work that should be expected of the library. I respectfully recommend that the Personnel Classification Board be urged to reclassify this position before further efforts are made to fill this vacancy.

During the month of July the office of editor-in-chief became vacant through the rather sudden illness and death of James C. Boykin. Mr. Boykin had a distinguished record of service with the United States Government extending over a period of some 40 years. Some of his closest personal friends were in the employ of the Department of the Interior. Accordingly, he served this office for a salary which was entirely inadequate for the responsibilities developing upon an editor-in-chief in a technical establishment. Although it is possible that some other person in the Government service may be found who is of a philanthropic turn of mind, your commissioner believes that the position of editor-in-chief should be reclassified and should rank in salary and in dignity with the position of librarian.

3. Every position in the Bureau of Education should be an important position. Some positions, however, are of such a key character that the carrying on of the responsibilities connected with them should not depend upon the health, tenure, or life of any human being. Positions of this character are: The chief clerk, the editor-in-chief, the librarian, the chief of the Division of Higher Education. In the past but one of these, the editor-in-chief, has had an assistant. It is my recommendation that there be assistant chiefs for all of these offices.

4. Of the numerous items which might be brought to your attention in a report of this kind, I select for especial comment three only:

(*a*) The need of a larger fund for printing. A year ago Commissioner Tigert, commenting upon this situation, wrote:

"In my last report I set out in some detail the situation with reference to printing funds for the Bureau of Education. This remains the most acute need of the bureau. At present the bureau is not able to print all of the studies which are produced by the specialists. This is an unsound and uneconomic procedure. The Bureau of Education is essentially a bureau of research and information. If the channels for communication through printing are not kept open, its research function is enormously impaired in value. There is nothing that I could urge more emphatically than the necessity for adequate printing funds if the bureau is to enlarge its usefulness.

The amounts available for the Bureau of Education printing for the past 15 years are as follows:

Fiscal year ended—	Allotment for printing	Fiscal year ended—	Allotment for printing	Fiscal year ended—	Allotment for printing
June 30, 1916	$52,000	June 30, 1921	$96,000	June 30, 1926	$44,000
June 30, 1917	57,000	June 30, 1922	65,000	June 30, 1927	45,500
June 30, 1918	64,000	June 30, 1923	56,000	June 30, 1928	42,500
June 30, 1919	85,000	June 30, 1924	48,000	June 30, 1929	45,500
June 30, 1920	83,000	June 30, 1925	48,500	June 30, 1930	47,000

In the budget for the year ending June 30, 1931, already approved by you and now in the hands of the Bureau of the Budget, $80,000 has been requested. If allowed, the amount will furnish some relief for the situation.

(*b*) Funds for the study of foreign school systems and for such researches in American education as in the judgment of the Secretary of the Interior should be undertaken. During the Commissionership of Dr. William T. Harris the Bureau of Education rendered a very distinct service to American schools by publishing monographs on the school systems of foreign nations. During the last few years comparatively little has been presented to the American school people along these lines. Changes of far-reaching importance in the school systems of other nations have come about since the Great War. At home the need for special study sometimes becomes imperative without much advance notice. A good sample of this was occasioned by the rapid advance of the radio industry. Many educators desire to undertake programs of broadcasting school work for both adults and school children. Others are apprehensive lest their failure to do work of this kind would handicap their own school systems. The Bureau of Education has been unable to meet in any adequate fashion demands made upon it in this regard because it has had at its disposal no funds with which to finance investigations of this sort. Sixty-five thousand dollars has been requested in the budget for the year ending 1931 to meet needs of the types just enumerated.

(*c*) The library of the Bureau of Education is one of the world's great libraries in a narrow field—that of education and administration of schools and colleges. Here is a great depository of original reports, catalogues, and textbooks, without access to which the history of American education can not be written. There are in it at the present time catalogues of colleges, State and city school reports, as follows:

Volumes	Catalogues of colleges, universities, and teachers colleges	School reports		Catalogues of foreign universities
		State	City and town	
Bound	4,849	1,365	2,935	
Unbound	19,914	1,000	9,000	
Total	24,763	2,365	11,935	1,750

In addition there is a remarkable collection of textbooks used in American schools; 7,295 of these have been catalogued. There are approximately 8,500 on the shelves which have never been catalogued. One of the most important pieces of work which should be done is to catalogue these books and to issue for the use of students of education bibliographies in the various school curriculum fields such as reading, spelling, and arithmetic. We should have in the library now three or four additional members of the staff to do this work and to carry on the usual functions of our library. New demands for library service are being made upon the library. At the last convention of the American Library Association the following resolution was adopted:

RESOLVED, That the American Library Association urge the Federal Government to develop and organize the educational library which now exists in the Bureau of Education to a point where it will be able to render an enlarged service to the libraries and schools of the Nation.

The American Library Association also urges that provision be made for research and surveys in the field of library service, including libraries in elementry schools, high schools, colleges, and teachers colleges, and that skilled advice and trained leadership be made available to guide the rapid development which is now taking place in the school and public library fields.

The American Library Association further urges that the Government widen the scope of its statistics relating to libraries and issue them at more frequent intervals and that the range of its published studies for libraries be enlarged to include bibliographies, service manuals, and other library aids. Be it further

RESOLVED, That the American Library Association committee on education be instructed to work toward these ends and that copies of these resolutions be sent to the President, to the Secretary of the Interior, to the Commissioner of Education, and to the Committee on Education of the Senate and House of Representatives of the United States Congress.

Your commissioner recommends in this connection that a bulletin on statistics of libraries be printed every four years and that there be incorporated into it a directory of libraries. A special committee representing the American Library Association is cooperating with the Bureau of Education in determining what information should be incorporated in such bulletin.

These demands for increased service to be rendered by the library bring forcibly to our attention the importance of assigning more space to it. Not only are there inadequate quarters for the library staff but the stacks are overcrowded. The commissioner recommends that an investigation be made of the feasibility of erecting space for stacks upon the roof of one of the wings of the present building. If this is structurally impossible, plans should be developed for new housing of the bureau's library.

III. The Alaska Division: Your commissioner has spent a great deal of time in studying the work in Alaska. One entire month has been given to a consideration of the problems of the Alaska Division, including an actual visit to the Territory. Only in the education of the natives of Alaska does the Commissioner of Education exercise any administrative authority over American schools, and here, curiously enough, are included responsibilities not usually assigned to school administrators, namely, hospitalization, oversight of certain trading and other financial operations, and the supervision of the reindeer industry. Yet these same extraneous responsibilities have been discharged by the Commissioners of Education to the general satisfaction of all concerned and within the limits of rather restricted budgets. My recommendations for this service are stated in conjunction with certain general principles which seemed to me to be sound. They are:

A. That the seat of authority to administer should be located as near as possible to situations demanding attention. This would seem to demand the transfer of the Chief of the Alaska Division from Seattle to Juneau, or possibly Anchorage. This transfer is respectfully recommended even if no other changes at this time are contemplated.

B. That the officer charged with administration of Alaskan affairs be given large discretionary powers. In the past many matters which could have been settled on the ground in the light of broad policies laid down in Washington have been referred to the Commissioner of Education or an Assistant Secretary of the department for action, causing serious delays.

C. That financial obligations properly incurred be settled promptly. If this is to be the policy of this department, a disbursing officer representing the department in Alaska is required.

D. That as rapidly as possible the office of Commissioner of Education be relieved of such responsibilities for the Alaskan service as are primarily administrative in character. The adoption of this policy would involve:

1. Transfer of the oversight of the reindeer industry to other representatives of the Department of the Interior. It is only after most careful thought that I make this recommendation, since the Chief of the Alaska Division and others in the bureau do not agree with me that it should be made. Mr. J. H. Wagner brings to my attention such foreign commendations of the work of the bureau as that of Dr. Knud Rasmussen, given to the Danish Parliament after a survey of Eskimo life in Alaska, Canada, and Greenland, and a recent editorial in the Manchester Guardian. From the latter Mr. Wagner quotes:

> There have been few social experiments more interesting than the introduction of reindeer into Alaska, and the current report of the United States Bureau of Education shows that the experiment is still going well. That the work should be done by the Bureau of Education gives some clue to its nature and purpose. In the nineties of last century the native Eskimos were in some danger of exhausting their precarious food supply of seal, walrus, and wild caribou. The United States Government therefore imported reindeer from across the Bering Sea. In 10 years more than 1,000 head were introduced together with Lapp herdsmen to tend them and to train the inhabitants to do likewise. The number of reindeer has now grown to more than 1,000,000. With the meat for food, the skins for clothing, and a slight surplus for export and exchange the simple needs of the Eskimo are satisfied. Alaska is an object lesson in the treatment of subject races. The purpose of the reindeer industry was primarily to make the country self-supporting and not an economic dependency to be exploited for raw materials or as a market. The Eskimo himself owns the animals he keeps; he is not just a herdsman employed by a huge reindeer syndicate. If ever Alaska becomes, as it conceivably may, one of the world's important meat producers, a less scrupulous commercialism may invade the country. But export is not easy; lofty mountains fringe the southern coasts, and the western ports are icebound for much of the year. Up to now the Eskimo has nothing but gratitude to feel toward the United States; nor is he the only one who might learn something from the Bureau of Education.

"The reindeer industry," writes Mr. Wagner, "it is scarcely necessary to say, is the foundation stone in the building of native citizenship for more than two-thirds of the native population of Alaska. For this purpose the industry was established by the Bureau of Education and has not only successfully established the industry for the natives, but added greatly to the wealth of the Territory of Alaska. This industry is a vital and important factor in the native's education. Control of deer belonging to Alaska natives should not, at the present stage of the native's progress toward citizenship, be controlled by any other than those responsible for his welfare and education."

One is justly proud of a piece of work in which he has been conspicuously successful. Were I to allow sentiment to prevail I should vigorously oppose the transfer of this enterprise in which we have been engaged for nearly 40 years. I would that space permitted me to review the heroic efforts of Sheldon Jackson, our general agent of education in Alaska, who after failing to get any money from the

Fifty-first Congress appealed, with the approval of Commissioner Harris and Secretary of the Interior Noble, to the people through the press of Boston, Chicago, New York, Philadelphia, and Washington, and secured $2,146. With this money the preliminary work of getting reindeer from Siberia to Alaska was done and 16 deer were purchased and successfully transported more than 1,000 miles through a stormy sea. Doctor Jackson reported to his chief, Commissioner Harris, in 1891, "several important objects" he hoped to attain through this work. I quote sections of this report as follows:

> In the first place, the population, which is now upon the verge of starvation, will be furnished with a permanent, regular, and abundant supply of food.
>
> In the second place, the introduction of domestic reindeer into Alaska will not only thus arrest the present starvation but will assist in increasing the population. With a more generous food supply this population will commence to increase in numbers. Occupying a region whose climatic conditions are so rigorous that but few white men will ever be willing to make their permanent home in it, it is important, if we would save it from being an unpeopled waste and howling wilderness, that we build up the people who through generations have become acclimated and who are as fervently attached to their bleak and storm-swept plains as the people of temperate and torrid zones to their lands of comfort and abundance.
>
> Thirdly, the introduction of domestic reindeer is the commencement of the elevation of this race from barbarism to civilization. A change from the condition of hunters to that of herders is a long step upward in the scale of civilization, teaching them to provide for the future by new methods. Probably no greater returns can be found in this country from the expenditure of the same amount of money than in lifting up this native race of barbarism by the introduction of reindeer and education.
>
> Fourthly, the introduction of the domestic reindeer will solve the question of Arctic transportation.
>
> In the fifth place, the introduction of domesticated reindeer will add a new industry to that country, which will go to swell the aggregate of national wealth.

Would that Doctor Jackson might return to Alaska and see how well he had builded. Sentiment and a proper pride would urge that the Bureau of Education continue to supervise reindeer. But the reindeer problems of to-day are quite different from those which have been successfully met by the Bureau of Education. These new problems are (1) control of pests, a very proper function of the Department of Agriculture; (2) research into feeding, upbreeding, cross-breeding with caribou, etc.—in a word, agricultural college research work; and (3) marketing the surplus which Doctor Jackson expected to result from his efforts. For none of this work is this office equipped.

2. Transfer of the oversight of certain financial transactions to another representative of the Department of the Interior, perhaps to the commissioner, who represents the Secretary in Alaska. This would include the so-called Alaska trust fund, which probably should not be terminated for a few years, since there are still parts of Alaska not cared for by traders and other parts where the natives should not be left to the mercy of persons who possess a monopoly in this field. This work has been admirably administered by Mr. A. H. Miller, who has rendered faithful and unselfish service to natives for many years. This recommendation would also cover the services rendered by the Alaska Division to the village of Metlakatla on Annette Island and general supervision of cooperative stores.

Whoever exercises oversight of this financial work in Alaska will doubtless find that it is still desirable to utilize the services of the teachers in the native schools to assist in keeping records of accounts of the native cooperative stores.

3. A transfer of the hospitals and their staffs to another representative of the department and the development of a policy which will tend to coordinate the health work for the natives with the health work for the whites under the health service of the Territorial Government. If this service should remain in the Bureau of Education, the Chief of the Alaska Division insists that there be a general supervisor for the medical activities. Alaska is a land of such sparse population and vast area that it seems unwise to develop two overhead organizations, one Federal and one Territorial. Your commissioner believes that in a short time the Territorial government should perform all of this service, receiving subsidies for care administered to nontaxpaying natives.

The nurses who minister to the needs of the children should remain under the direction of those responsible for the administration of the schools, much after the custom prevailing in American cities.

4. A gradual transfer of the actual management of the schools for the natives to other agencies. The Bureau of Education should develop, or at least approve, the course of study to be followed; should set the standards for teachers and should certificate them; and should study and determine the best methods of teaching of the natives. In all towns and cities where schools are maintained by the Territory for the white children and by the Federal Government for the natives a program of consolidation should be instituted designed to bring both schools under one management. Your commissioner would recommend the development of a program of subsidies whereby the Territorial school in a given community would be reimbursed by the Federal Government for the education of the children of all nontaxpaying natives. Doubtless the management of the schools in strictly native villages and in the far-flung sections of the west and north coasts will remain a Federal responsibility for many years. If the Bureau of Education is to continue with any administrative authority, this is its legitimate field. Regardless of the authority, administering native education there should be a clear-cut separation of interests in our so-called industrial schools. Up to the present time these schools have been primarily orphanages for young children rather than industrial schools for adolescents. In the future these schools should be real centers in secondary-school training, especially of vocational types, for the native children living over large areas of Alaska.

5. Transfer of the operation of the U. S. S. *Boxer* to the commissioner of the department in Alaska. The northbound voyages of this vessel are concerned very largely with supplies for existing schools and hospitals and materials with which to build new schools and hospitals or repair old ones. On the voyage south the *Boxer* frequently brings out reindeer carcasses for natives. It can still render service for the schools if operated by the department.

Respectfully submitted. WM. JOHN COOPER, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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UNITED STATES DEPARTMENT OF THE INTERIOR

ANNUAL REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR THE

YEAR ENDED JUNE 30

1930

UNITED STATES
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THE OFFICE OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIAM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D., LL. D.
July 1, 1906, to June 30, 1911

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to August 31, 1928

WILLIAM JOHN COOPER, ED. D., LITT. D., LL. D.
February 11, 1929

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ANNUAL REPORT OF THE COMMISSIONER OF EDUCATION

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., August 30, 1930.

SIR: The past year has been one of transition, of reorganization, and of planning to meet new and larger issues in education. Although some previous activities have been discontinued, the new work undertaken has required the services of all former employees, who have adjusted themselves to new duties cheerfully.

GENERAL POLICY

After a discussion of proposed plans with a committee of five advisers whom I had selected upon taking office, and approval by you, the office has been reorganized in the light of these general principles:

1. That the reasons for which Congress established the Office of Education, namely, the collection of school statistics and a wide dissemination of information on education, are still valid and should receive chief emphasis by our staff.

2. That such promotional activities as had been assumed from time to time, and chiefly during the war period, should be eliminated as rapidly as possible.

3. That the demand for more fundamental research in education, indicated in part by bills calling for the creation of a Department of Education and appropriations for research, and also by petitions and memorials from organized professional groups requesting investigation of particular projects, is fully justified.

4. That the administrative responsibilities gradually accruing to the commissioner and his staff over a period of some 40 years and arising in particular from the education and medical relief of natives in Alaska should be transferred to other officials as rapidly as possible.

5. That certain service functions gradually developed by the office should be continued partly because they furnish the best means of disseminating information, partly because they furnish the only means of keeping members of our staff in direct contact with actual school problems, and partly because situations arise in local and State governments where an agent of the Federal Government is the only satisfactory person to serve as a referee.

6. That the local autonomy of American education can best be preserved by having in Washington a staff large enough to perform adequately these regular and recurring duties and by augmenting this staff temporarily for the performance of specific technical tasks, as

needs arise, from the experts employed in universities and colleges and the public-school system.

7. That such specific tasks be undertaken only at the request of and with the approval of well-established, organized professional groups; and that each project so approved be submitted to Congress on its own merits and carried on with funds provided for that specific purpose.

8. That every effort be made to locate researches now under way in education, to cooperate with the local governments, universities, and volunteer agencies which are making such studies, and, in so far as possible, to coordinate the efforts of all such groups.

REORGANIZATION

In line with this general program, the office has been reorganized. The 11 coordinate divisions shown in Figure I have been consolidated into 5 major divisions as indicated in Figure II. Of these 5, the Division of Research and Investigation, headed by the assistant commissioner, was created to consolidate and coordinate the efforts of the research divisions, a new division of special problems, and a division of foreign school systems (which had been a section in the service division).

Early in my term of office and at your request, the Personnel Classification Board gave the commissionership a new classification and created the office of assistant commissioner in the grade formerly held by the commissioner. This action seemed to imply that the assistant commissioner was to assume much of the responsibility formerly devolving upon the commissioner. Under the present organization (see Fig. II), the assistant commissioner is directly responsible for educational investigation and research of the essential work of the old Bureau of Education.

Figure II indicates that this major division embraces and coordinates the work of five divisions:

1. A division of colleges and professional schools which succeeds to the work of an older division of higher education (shown in Fig. I);

2. A division of American schools which succeeds to most of the work of former divisions of city schools and rural schools;

3. A new division of "special problems." To this division falls the work of studying some results of recent efforts to make our schools minister in fact to all the children of all the people. This ideal of democracy, incorporated in many statutes for compulsory school attendance, has brought into the schools children handicapped in various physical ways; the crippled, the partially sighted, the hard of hearing, and those with speech defects; and children handicapped mentally; the dullards, the morons, and the imbeciles. This ideal has also brought the educational system in closer contact with indigenous peoples.

Although the Commissioner of Education has had nothing to do with the American Indian in continental United States, he has been responsible for more than 40 years for the education of the Alaskan Indian, the Aleut, and the Eskimo. During these years, as noted in my last annual report, most of the energies of the commissioner

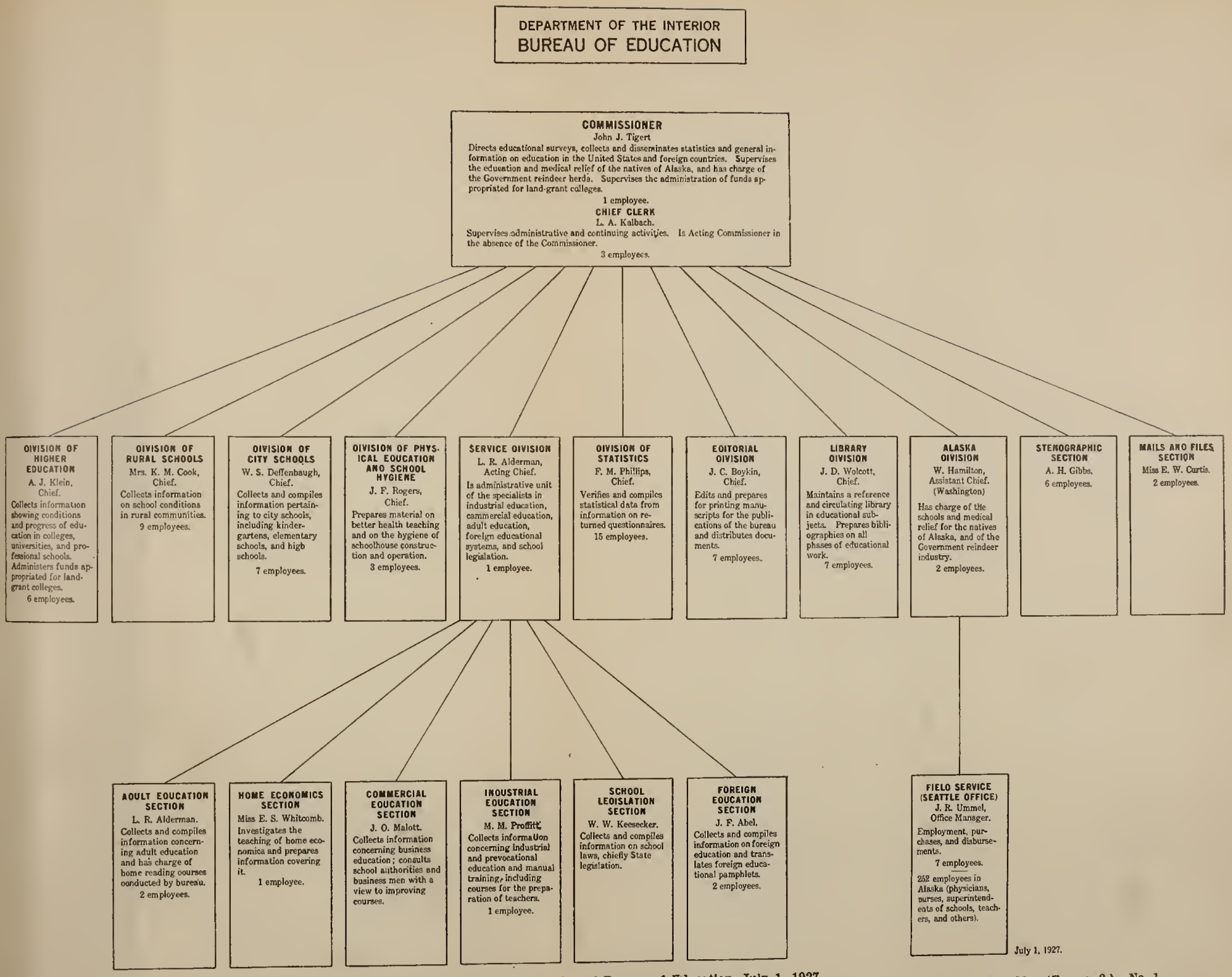


FIGURE 1.—Organization of Bureau of Education, July 1, 1927

12650—30. (Face p. 2.) No. 1



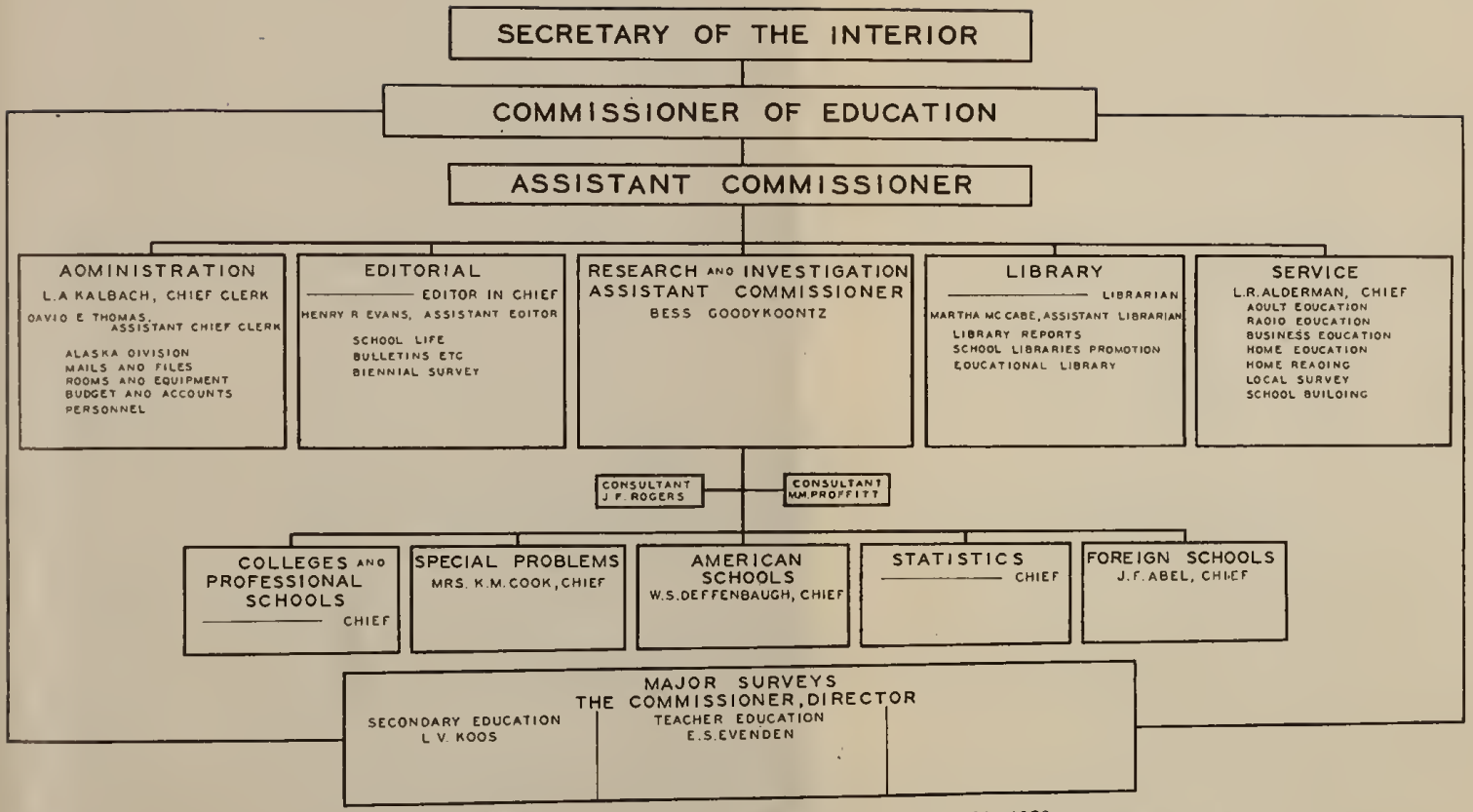


FIGURE II.—Organization of Office of Education, June 30, 1930

12650—30. (Face p. 2.) No. 2

and his staff have been devoted to the problems of administration. The large educational service which has been rendered Alaska has been primarily one of civilizing the native peoples. With keen social insight Dr. Sheldon Jackson, some 40 years ago, pointed out that the difference between barbarism and civilization lay in the difference between a hunter and a herder. In my report last year I observed that the Department of the Interior had right to be proud of the service rendered through the Bureau of Education in changing the native Alaskan from a hunter to a herder. Nevertheless, in all these years there has not been any fundamental psychological research into the capacities of these native peoples. This work should be undertaken as rapidly as funds and workers are available. It, also, becomes a responsibility of this new division and a beginning which has been made will be discussed later in this report.

There are also special problems involved in the education of the negro race. Although a surprisingly large number of our negro citizens have adapted themselves well to our historic school systems, it is obvious that there are a great many of them on whom this adjustment works undue hardship. It is generally conceded that the negro race has made the one distinctively American contribution to music. But a race whose ancestors have for centuries lived in the Tropics is more likely to supplement than to duplicate the contributions of a race whose ancestors for generations have lived in the Temperate Zones. We may reasonably look for a social psychology somewhat different. During the past year we have had employed on the secondary survey staff a negro educator who has been studying the nature of the work done in the secondary schools now provided for negroes. With a view to continuing and extending this work we have provision in the Budget for the fiscal year beginning July 1, 1930, for a specialist in negro education. We hope to secure an outstanding educator of the negro race to fill this regular place on our staff.

4. A former section on foreign education has been raised to the status of a division. During the long administration of William T. Harris American education was very greatly benefited by the publication of bulletins, reports, and articles on European schools. Your commissioner believes that American schools are now confronting problems so new that we have not so much to learn from the Old World as we did in the time of Doctor Harris. Nevertheless, many nations of the Old World have abandoned monarchy and aristocracy and are trying democracy. This brings them face to face with many educational problems similar to those we are trying to solve. The numerous experiments which are going on in Europe should have lessons of value to American educators. Accordingly, I believe that this division should receive increased support sufficient to enable it to keep in close contact with foreign experiments, and to prepare monographs from time to time for the benefit of Americans who either do not read foreign languages or are unable to find the time to study the situation for themselves. At least two specialists should be added in the near future—one, an expert in comparative education, European; the other, an expert in comparative education, Oriental.

5. A statistical division. All four divisions enumerated above have statistical work to do. It has been found economical in the past to group these statisticians in a pool or single division rather

than to scatter them among the experts whom they serve. Consequently the division of statistics has been kept intact, but since it is the hand-maid of the other four, it constitutes the fifth division in the major division of research and investigation.

LIBRARY

Time has proven, I am sure, that the early commissioners were wise in establishing our library. Commissioner Brown's reorganization and new catalogue made it available not only to us but to the educational public. The Personnel Classification Board has given a new classification for librarian, and the Civil Service Commission has certified three persons for librarian. Miss McCabe has served as acting librarian during the entire past year and has rendered excellent service. You will receive recommendation for an appointment before this manuscript appears in print. Little further progress can be made, however, in filling the lacunæ in our library or completing its catalogue until ample quarters are secured. Many of our books are boxed in the basement of this building due to lack of space, and the present stacks are loaded to the limit of safety.

EDITORIAL

It is through the editorial division that the Office of Education speaks. During the fiscal year this office has been without an editor-in-chief. After the death of Mr. Boykin the Personnel Classification Board was requested to reclassify the editor's position. This was done. And as this is written, consideration is being given to the qualifications of three persons certificated by the Civil Service Commission. By October first we hope to have a new editor-in-chief. In the interim our veteran assistant editor, Doctor Evans, has rendered splendid service as acting editor. His work with School Life especially has been commended by educators outside our staff.

A year ago I called attention to the inadequacy of our fund for printing. Two thousand dollars more were given for the year, an amount which did not permit publication of accumulated manuscripts of merit. I urge a printing fund of not less than $80,000 for next year.

PUBLICATIONS

The nature of the publications issued is fixed in a general way by law. The original act of 1867 (14 Stat. L. 434) provided for "collecing such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and mainteance of efficient school systems, and otherwise promote the cause of education throughout the country." It specifically directed (sec. 3) "That it shall be the duty of the Commissioner of Education to present annually to Congress a report embodying the results of his

investigations and labors, together with a statement of such facts and recommendations as will, in his judgment, subserve the purpose for which this department is established."

The execution of this instruction produced an annual report increasing each year in size and complexity due to many causes, among them the following:

1. The settlement of the West and the admission of new States to the Union.
2. The increased interest in public education, especially as non-English-speaking immigrants increased in number.
3. The growth of public high schools which became marked after 1890.
4. The improvement of administrative practices in business, especially in record keeping and cost accounting, which began to interest educators about 1910.
5. The increasing difficulties of financing schools due to increase in popularization, fluctuation in the value of the dollar, and changing character of taxable wealth.

Congress recognized the problem as early as 1896 (29 Stat. L. 140, 171) in authorizing the Commissioner of Education to publish a bulletin which was clearly intended to care for some topics theretofore treated in the annual report. No advantage was taken of this law until 1906.

By this time, however, the demands had increased so greatly that it had no appreciable effect in lessening the bulk and expense of the annual report. One volume had by 1889, come to be devoted entirely to statistics. There seemed to be little merit in an annual collection of these data. War conditions made economies desirable. Consequently, in 1918, Commissioner Claxton attempted to segregate the report on activities in which Congress and his superior administrative officers might be interested from the large body of material of interest primarily to educators and investigators of educational problems. Therefore, out of what is legally an annual report came two separate documents now known as: (1) The Annual Report of the Commissioner of Education; (2) The Biennial Survey of Education.

This frank admission that the primary interest in the materials of the biennial survey rested with workers in the field, led to issuing chapters of it in advance as bulletins, a plan which made it possible to get materials into the hands of those interested months in advance of the completed volumes at greatly lessened expense, since it became unnecessary to send a set of bound books to a student interested in a single chapter only.

The bulletin series authorized by Congress in 1896 and begun by Commissioner Brown in 1906, has enjoyed wide popularity. The numbers issued each year have been as follows. The number of issues (included in the totals below), which have been advance prints of chapters later appearing in the biennial survey, are indicated in parentheses.

Year	Number of bulletins	Year	Number of bulletins	Year	Number of bulletins
1906	3	1914	50	1922	50 (14)
1907	4	1915	50	1923	60 (28)
1908	8	1916	50	1924	40 (7)
1909	11	1917	55	1925	45 (21)
1910	6	1918	51 (8)	1926	24 (6)
1911	19	1919	87 (37)	1927	41 (21)
1912	33	1920	48 (6)	1928	29 (9)
1913	60	1921	53 (17)	1929	38 (23)

Acting under the general instruction given by Congress in 1867 to diffuse information every commissioner has sent out other material in the form of circulars, printed or mimeographed news letters, etc. Much of the mimeographed material especially has been found useful in the economical administration of the office, since many inquiries can be answered by sending circulars containing a compilation of materials asked for. This makes possible a smaller clerical staff to handle correspondence and also in the long run saves the time of professional workers.

On August 1, 1918, the office began issuing a monthly magazine, School Life. This magazine has carried to the educational public much information which could not have been put out so reasonably in any other form.

During the past year we have given careful consideration to our publications and have adopted a policy for them. We plan to issue the following publications for the purposes indicated:

1. The Annual Report of the Commissioner of Education—a concise statement of policies, proposed plans, and the activities of the staff. It is aimed to make this report so brief and to the point that it may be possible for every Congressman to read it.

2. The Biennial Survey of Education—in two volumes, one statistical, and the other an explanation of educational progress and trends. It is proposed to continue to issue in advance to selected mailing lists chapters as they are ready. It is not planned any longer to issue them as numbers in the Bulletin series. Instead chapters will be assigned numbers in advance of preparation. The advance sheets will go out as sections of the biennial report under their chapter numbers with the additional words "Advance sheets."

3. The Bulletin series will be devoted to monographs and studies of permanent value. As heretofore, this series will include studies made by our specialists and studies made by workers in the field. In many cases these are revisions of doctoral dissertations which are of general value to educators but not likely to have sufficient circulation to become commercial manuscripts. In general, bulletins will be thirty-two pages or more in length.

4. Pamphlets. These will usually be concerned with materials ranging from 8 to 32 pages and in fields rapidly changing. For instance, the numerous inquiries about the use of radio in education will doubtless make necessary the issuance of bibliographies in this field. It can not be expected that any bibliography as much as a year old will be complete enough for most investigators. Yet the present status of the subject will hardly justify the preparation of a large critical bibliography.

5. Leaflets. This series will be used for material which can be covered usually on 2 to 8 pages. One series of this sort has been issued for a number of years as reading courses, under the direction of the Home Education Section of the office. This furnishes an inexpensive way of bringing together material requested by laymen interested in aspects of education. It is in demand by members of the parent-teacher associations and other adults, asking suggestions for home reading.

6. Circulars will be issued in mimeograph form. These will often be concerned with summarizing the work of conferences held under the auspices of the commissioner and his staff. Librarians will come to understand that bulletins are to be regarded as worthy of binding for permanent reference but that circulars and pamphlets are not.

7. School Life. This is in fact the organ of the Office of Education. It expresses through articles and editorials views of the commissioner and his staff on various aspects of school work.

The Clip Sheet, formerly issued to newspapers and educational periodicals, has been discontinued. Items of news value are now given directly to the representative of the United States Daily and to other representatives of the press who call at our office.

SERVICE DIVISION

The activity of the Service Division is adequately described by the report of Mr. Alderman, the chief, which follows. It may be expected that this division will be called upon to direct important surveys in the field.

ADMINISTRATION

All administrative responsibilities, including the administration of schools and medical relief in Alaska, are handled through the chief clerk. Mr. Kalbach's report attached hereto is an adequate statement of progress. Since my last report the administration of the reindeer services has been assumed by the Governor of Alaska. At present District Superintendent Hawkesworth is acting chief of the Alaska Division with headquarters at Juneau. We are hoping that the next territorial legislature will establish a territorial board of education with power to select a commissioner and also a territorial board of health. If these two steps can be taken along lines already well established in some of the States it should be possible to effect a unified school system in Alaska in place of the present dual system and to consolidate the health work. Such action should provide present service at less expense or better service for the present outlay. The commissioner plans to hold conferences at Juneau in the spring of 1931 in the interest of these policies.

DIVISION OF MAJOR SURVEYS

Figure II above indicates that this is a new division operating under the immediate direction of the Commissioner of Education. It represents the chief new addition to the work of the old Bureau of Education. Its establishment is based upon the policy stated above that the staff at Washington should be kept large enough to

discharge the recurring investigations of education and answer the numerous questions from the field only; that major researches should be undertaken on special appropriations and by experts brought in for temporary service. All part-time workers should be sent back to their respective former posts after the study on which they have been engaged has been completed and full-time workers should be expected to find new places.

The above policy does not mean that the Federal Government only benefits. It is true that it enables the Commissioner of Education to secure the part-time services of men whose salaries at their respective school and college posts would not permit them to accept the salaries paid by the United States Government. Accordingly, such men could not be had under present conditions and probably under Civil Service regulations would not be available at all. The institution which loans such experts also gains. For instance, both associate directors of the two major surveys now in progress are employed by their universities at a higher annual salary rate than the Department of the Interior can pay; yet after a three years' connection with the foregoing surveys they will return on full time to their respective institutions with a view of their respective fields that is nation-wide. Such a view they could obtain under other conditions only after years of study and probably they would never get as thorough a grasp of the problems in their national aspects as they will in our service.

Moreover, the courses which these men give hereafter will be enriched by detailed information and personal experience almost impossible to secure except through an intensive nation-wide study. Therefore, this policy will redound to the advantage not only of the institutions regularly employing these experts, but through them it will reach a group of younger men and women who study in their seminars. The benefit will in this way filter out into educational practice and should be felt for a generation.

SURVEY OF SECONDARY EDUCATION

Fifty thousand dollars for undertaking this investigation became available in the fiscal year just closed. The field to be studied had already been outlined in great detail by a National Committee for Research in Secondary Education of which Dr. J. B. Edmonson, dean of the School of Education, University of Michigan, was chairman, and Carl A. Jessen, of this office, secretary. Through a subcommittee headed by Dean E. J. Ashbaugh, of Miami University, Ohio, a detailed outline for a very comprehensive study of secondary education had been developed and approved by the national committee.

On my recommendation you appointed a board of nine consultants representing important organized educational interests, including those associations which had been most interested in promoting this work. This board consists of the following persons:

H. V. Church, Superintendent, J. Sterling Morton High School, Cicero, Ill.

Ellwood P. Cubberley, Dean, School of Education, Stanford University, Calif.

James B. Edmonson, Dean, School of Education, University of Michigan, Ann Arbor, Mich.

CHARLES H. JUDD, Director, School of Education, University of Chicago, Chicago, Ill.
CHARLES R. MANN, Director, American Council on Education, Washington, D. C.
A. B. MEREDITH, Commissioner of Education, State of Connecticut, Hartford, Conn.
JOHN K. NORTON, Director of Research, National Education Association, Washington, D. C.
JOSEPH ROEMER, Professor of Secondary Education, University of Florida, Gainesville, Fla.
WM. F. RUSSELL, Dean, Teachers College, Columbia University, New York, N. Y.

During the period in which the personnel of this board was being selected and appointed by you, Dr. L. V. Koos, of the University of Chicago, accepted your appointment as associate director and expert in Secondary School Research. On November 25 the Board of Consultants and Doctor Koos met in the commissioner's office to discuss the outline prepared by the National Research Committee. It appeared that the committee had outlined about four times as much work as could be done within the appropriation made by Congress. Consequently the following fields were eliminated entirely:

1. The historical development of secondary education.

   Absence of monographs on the rise of the high school in several States and the lack of any adequate history of the American academy rendered a treatment of this field, except at great expense, impossible.

2. Objectives.

   It appeared that to ascertain the objectives of instruction by analyses of the courses of study and methods of teaching would be expensive and perhaps barren of important results. Objectives enumerated in statements from the field were likely to be largely repetitions of those set forth by important educational committees during the past two decades.

3. School housing.

   Variations in climatic conditions throughout the Union and in the financial ability of districts seem to make this field more profitable for local surveys than for a nation-wide study.

4. Teaching staff.

   The vital importance of this subject was recognized but in view of the activity of those interested in educating teachers for a nation-wide study of that subject, it seemed desirable to have this subject treated in connection with the whole subject of professional preparation of teachers.

5. Financing secondary schools.

   The importance of this topic was fully appreciated but the difficulties inherent in segregating high-school funds from other moneys were so great that it seemed better to leave this subject until the financing of education in general could be handled.

Accordingly the board of consultants and the directors decided that the primary investigations should be conducted in the following fields:

1. Organization of secondary schools.
2. Student personnel problems.
3. Administrative and supervisory problems in secondary education.
4. Administrative and supervisory staff.
5. Curriculum activities.
6. Extracurriculum activities.

It was further decided that there should be a professional advisory committee representing the various aspects of secondary education, including its relations to elementary education and higher education, appointed by the commissioner. The members of such committee were to serve without any expense to the Federal Government and were to be called together with the Board of Consultants at the time of the annual meeting of the Department of Superintendence. According to this plan there has been one meeting of the foregoing committee, held in Philadelphia, February 22, 1930, which was attended by 37 persons, all of whom had received progress reports through the mail. The plans of the board of consultants and the directors were thoroughly discussed and suggestions of value came from many of the members. This committee is rendering a valuable service through criticisms of work in progress and by enlisting cooperation in the field.

It is planned to appoint this fall a committee of between 50 and 60 laymen representing all aspects of lay opinion and all States in the Union. Condensed reports of progress will be sent to these persons and their criticisms received and considered. It is not planned to have any meetings of these laymen as a group.

This survey as organized furnishes a model which, if satisfactory, will be followed in all other special studies. In brief, the Commissioner of Education is director; an expert in the field concerned is part-time associate director; a member of the staff of the Office of Education, whose interest lies in this field, becomes executive assistant; a board of consultants, all interested in the particular field, constitutes a board of directors. A rather large professional advisory committee enlists cooperation and secures consideration of all aspects of the subject. A group of outstanding laymen adds a lay point of view to the work of the professional groups, and helps to hold education to its democratic purposes.

By October 1, 1930, the survey will be operating with a staff as follows:

Ten part-time professional experts stationed in the field. Under each of these will work some paid experts and some nonpaid student investigators.
Eight full-time professional workers stationed in Washington.
Eight full-time clerical assistants stationed in Washington.

SURVEY OF THE TEACHER SITUATION IN THE UNITED STATES

A nation-wide study of the professional education of teachers, the demand for teachers of various sorts, and the supply of those adequately trained to meet these demands has been sought for many years by professional associations intimately concerned with the problem of educating people for this work. The request which brought about the present survey originated with the American Association of Teachers Colleges and was seconded by the Association of Deans of Schools of Education, the National Council of State Superintendents and Commissioners of Education, and the North Central Association of Colleges and Secondary Schools. A joint committee of these four bodies presented the matter to the Commissioner of Education and drew up a formal petition which was

forwarded through the Department of the Interior and the Bureau of the Budget to Congress. It resulted in an appropriation of $50,000 for the current year and authorization to pursue the study through three years at a cost not to exceed $200,000. Immediately after the law became effective you appointed the following persons to serve as a board of consultants:

Dr. William C. Bagley, Teachers College, Columbia University, New York, N. Y.
Dr. W. W. Chambers, Ohio State University, Columbus, Ohio.
Dr. George W. Frasier, President, Colorado State Teachers College, Greeley, Colo.
Dean William S. Gray, University of Chicago, Chicago, Ill.
Dean M. E. Haggerty, University of Minnesota, Minneapolis, Minn.
Dean Henry W. Holmes, Harvard University, Cambridge, Mass.
Dr. John A. H. Keith, Superintendent of Public Instruction of Pennsylvania, Harrisburg, Pa.
Dean William Webb Kemp, University of California, Berkeley, Calif.
Dr. W. P. Morgan, President of the State Teachers College, Macomb, Ill.
Dr. Shelton Phelps, George Peabody College for Teachers, Nashville, Tenn.
Dr. D. B. Waldo, President of the Western State Teachers College, Kalamazoo, Mich.

Seven of these gentlemen were able to meet with the commissioner at Columbus, Ohio, following the annual meeting of the National Education Association. We discussed the fields to be studied and the possible personnel. It was unanimously agreed that the commissioner should recommend to you the appointment as part-time associate director and expert in teacher education, Dr. E. S. Evenden, of Teachers College, Columbia University. He is now at work. It was also decided to appoint a professional advisory committee representing all organized groups interested in any aspects of the profession of teaching and others concerned with school practice. Early in the fall a list of persons will be sent to you for consideration. It is likely that a group of lay citizens will also be selected to consider some aspects of this problem. If so, I believe these persons should be members of boards of trustees who are confronted with financing and administering programs in the field.

PROPOSED STUDY OF SCHOOL FINANCE

At the Atlantic City meeting in February, 1930, the National Association of State Superintendents and Commissioners of Education requested a study of school finance. The Commissioner of Education has discovered that school revenue and taxation was an important issue in 86 per cent of the legislative sessions of 1929–30, that tax commissions are at work in several States and that taxpayers' associations are actively urging studies in other States. The time seems to be ripe for a national consideration of this problem. Therefore the commissioner is urging a study at a cost not to exceed $350,000 to extend over a period of four years and recommends that $50,000 be appropriated for the next fiscal year. Should this study be authorized the money appropriated for special fields of research in education would be slightly in excess of $200,000 in the fiscal year 1931–32. This is approximately 20 per cent of what has been urged

for research in certain bills presented to Congress. The following table indicates the situation:

Survey	Fiscal year					
	1929–30	1930–31	1931–32	1932–33	1933–34	1934–35
Secondary education	$50,000	$100,000	$75,000			
Teacher preparation		50,000	80,000	$70,000		
School finance			50,000	100,000	$100,000	$100,000
X				(?)	(?)	(?)
Y					(?)	(?)
Total	50,000	150,000	205,000	170,000(?)	100,000(?)	100,000(?)

Other studies of nation-wide scope have been suggested but so far as the commissioner is able to tell there appears insufficient unanimity of opinion in the profession for any one of them to warrant formulating plans at the present time.

CONFERENCES

Acting under appointment of yourself, the Commissioner of Education has served as chairman of the Advisory Committee on Education by Radio. During the first half of the fiscal year the meetings and other activities of this committee required much time. By December 30, 1929, all subcommittees except the finance committee had made formal reports. On January 1, 1930, the investigations were formally closed. Your commissioner, as chairman, wrote the summary report for the committee. This was unanimously approved by the members by mail. No detailed comment on the report itself is called for since it is, as a printed document, already in your hands.

The annual conference of State superintendents and commissioners was held December 9 and 10, 1929. Following the precedent set in 1928 one day was given over to a consideration of issues raised by the commissioner and the second day to topics suggested by members of the council. It was agreed to try holding the 1930 meeting away from Washington, and on vote of the superintendents the conference has been called for December 8 and 9 at Milwaukee, Wis. This next conference will be followed by the annual meeting of the American Vocational Association which many superintendents wish to attend, thereby decreasing the expense of travel for them.

Conferences on rural education have been continued as heretofore. Programs have been prepared by Mrs. Cook and her assistants.

The commissioner also called on December 6 and 7, 1929, a conference at Washington in the interest of considering better education for home making. This conference held four enthusiastic sessions and adjourned after urging the commissioner to appoint a National Council on Home-Making Education and to hold regional conferences in various parts of the United States. It has not seemed to the commissioner that the time is ripe to appoint a council. He has begun, however, a series of regional conferences, holding one at the University of Cincinnati on March 21. This conference appears to have produced splendid results in awakening public-school authorities and college teachers to the importance of education to

preserve and improve the American home. It is planned to hold conferences in various sections of the United States, including several during the fiscal year beginning July 1, 1930. Already the dates have been set for such conferences at Ames, Iowa, Los Angeles, Calif., and tentative dates have been fixed for conferences at Portland, Oreg., and at Atlanta, Ga.

In addition to these formal conferences called under the commissioner's direction, the commissioner has participated in many conferences called by universities, State superintendents, national associations, and others.

ASSISTANCE AND COOPERATION

Particularly valuable cooperation in our work has come from the National Education Association, the American Council on Education, the National Association of State Superintendents and Commissioners of Education, the American Association of Teachers Colleges, the National Congress of Parents and Teachers, the American Library Association, and other professional groups, and from individual colleges, universities, and public-school officials too numerous to mention in this brief report.

Some of the foundations have also assisted us. The report of the committee on radio will show that the Carnegie Corporation, the Payne Fund, and other donors have contributed to the work of that committee. It has been possible to keep the files of the foregoing committee up to date, to answer numerous inquiries about radio, and to be represented at institutes on radio education through the courtesy of the Payne Fund which loaned to the Office of Education the half-time services of Armstrong Perry, and supplied the American Council on Education with a fund which has been used to pay Mr. Perry's traveling expenses and to provide him with a stenographer-clerk.

The Carnegie Corporation has made a grant of $12,500 to Stanford University to enable that institution, in cooperation with the Commissioner of Education, to make psychological and sociological studies of the natives of Alaska, particularly the Aleuts and the Eskimos. A capable investigator with good educational experience, H. D. Anderson, is now in Alaska operating under the immediate direction of the School of Education, Stanford University. There is reason to believe that this grant will be renewed for a second year if results are satisfactory.

COORDINATION

Only a few of the efforts made to coordinate educational research can be mentioned here. These may be taken, however, as evidence of policy.

1. An advisory committee to counsel with our library on a bibliography of educational studies made in partial fulfillment of the requirements for the doctor's and master's degrees at the various colleges and universities. This work was undertaken some years ago by Prof. Walter S. Monroe, of the University of Illinois. Since 1928 our library has issued a bibliography of these studies. Under

the new arrangement an advisory committee, headed by Doctor Monroe, assists in securing cooperation, and our bibliographers complete the document which is published each year as a bulletin of the Office of Education.

2. An advisory committee on State histories of education. Commissioner Dawson began the publication of monographs on State histories of education in 1887. The series was continued until 36 monographs had been published. Much educational history has been made since the last of these was published. All are out of print. Most of them should be revised. All should be brought up to date. For some three years the Association of College Professors of Education has had a committee studying the situation. Under a new arrangement, this committee, headed by Prof. Stuart Noble, of Tulane University, is endeavoring to secure carefully prepared, accurate manuscripts. These the office plans to publish as bulletins.

3. A national advisory council on school-building problems. Numerous requests for advice in the planning of school buildings, coupled with the death of Doctor Dresslar, who had served for many years as part-time specialist in this field, led the Commissioner of Education to call a conference on school housing at Atlantic City in February, 1930. At this meeting a plan worked out by Miss Alice Barrows, of this office, and several interested State specialists and architects, was discussed and tentatively adopted. It calls for a national council of 45, representing the 9 regions approved by the American Institute of Architects. In each region is a council of five or more. This nucleus of five consists of—

1. The architect representing the region in the American Institute of Architects;
2. One State superintendent or commissioner of education;
3. One city superintendent of schools;
4. One county superintendent of schools;
5. One member of a city board of education.

Each of the last four is appointed by the Commissioner of Education. These five in each region are empowered to add to their own number such other architects, structural engineers, illuminating engineers, heating engineers, millmen, electricians, etc., as they wish. It is hoped that this organization will prove sufficiently decentralized to enable it to meet local and climatic conditions and yet national enough to keep every school board informed of all progress in this field.

4. A National committee on cooperative research. A considerable number of city school systems have organized bureaus of educational research in recent years. These bureaus are working for the most part independently, without reference to what the others are doing. Very few, so far as known, are working on the same problems. With a view to securing cooperation in the study of large problems by such bureaus, a conference was held in Atlantic City in February, 1930, of about 60 persons representing city educational bureaus. The assembled group went on record as approving plans of the Commissioner of Education for furthering cooperation in research undertakings, and recommended that means be developed for putting the plans into operation. As a result of such action the following committee was appointed to study the problems involved in cooperative

research, especially the elimination of unnecessary duplication, and to formulate plans for action: Miss Bess Goodykoontz, Assistant Commissioner of Education; Dr. John K. Norton, National Education Association; Supt. R. G. Jones, Cleveland, Ohio; Dr. J. Cayce Morrison, President American Educational Research Association; Dr. J. L. Stenquist, Bureau of Research, Baltimore, Md.; Miss Prudence Cutright, Director of Instructional Research, Minneapolis, Minn.; Dr. Philip A. Boyer, Division of Educational Research, Philadelphia, Pa.; Supt. George Melcher, Kansas City, Mo.; and Supt. Carleton Washburne, Winnetka, Ill.

HOWARD UNIVERSITY

In fulfillment of the law, Howard University was officially inspected for the school year ended June 30, 1930, by the Division of Colleges and Professional Schools of the office.

During the preceding year tentative proposals had been worked out respecting a more complete program of education and research and the proper basis of distribution of support of the university to be divided between the board of trustees of the institution and Congress. These proposals have been given careful study by the Office of Education with the cooperation of the president and staff of Howard University, and the final report is now ready for presentation to the trustees and to the subcommittees of the Appropriations Committees of the Senate and the House of Representatives for their consideration and advice.

The total enrollment of students for the fiscal year was 2,619. For 1929 the total enrollment was 2,671. The maintenance of the enrollment of the institution at practically a stationary figure is in harmony with the plan to keep the enrollments at a definite level for several years until further provision is made for teachers and classroom space.

The number of graduates for the year was 325, as follows: Liberal arts, 85; education, 93; applied science, 7; music, 4; medicine, 64; dentistry, 16; pharmacy, 13; law, 21; religion, 7; graduate work, 15.

Due to increased appropriations from the Federal Government, a gift from the General Education Board, and increased tuition fees, it has been possible to lighten the loads of a number of teachers by additions to the faculty. Salaries have been increased and younger teachers have been sent away to take advanced studies. As a consequence the morale of the faculty has been very much strengthened. Helpful in the improvement of instruction has been the number of gifts received for improvement of the collection of books in the library. The total number of volumes in the library was 50,124, an increase of 2,552 over the number for the year preceding.

The total income from all sources for 1930 was $915,614.02, and the total expenditures were $869,640.50. The total assets were $2,694,257.12. There was received from private benefactions the sum of approximately $535,000.

Respectfully submitted.

WM. JOHN COOPER, *Commissioner.*

The SECRETARY OF THE INTERIOR.

DIVISION OF RESEARCH AND INVESTIGATION

This division, under the direction of the assistant commissioner, has supervision and direction of the following divisions: Colleges and professional schools, special problems, American school systems, statistics, and foreign school systems. The reports of the chiefs of these divisions are made a part of the report of the Division of Research and Investigation. In addition to the general direction of these divisions, the asisstant commisisoner's immediate office received 57 manuscripts submitted for publication by members of the office staff and by individuals outside the office. These manuscripts dealt with various phases of education and were examined critically with a view to determining their appropriateness for publication. Those found available were carefully revised and edited.

The staff of the immediate office of the assistant commissioner consists of two consultants and two secretarial clerks. Up to the present time the work of the consultants has consisted largely in research in school hygiene and physical education and in industrial education. The reports of the consultants and of the chiefs of the divisions mentioned above follow:

HYGIENE AND PHYSICAL EDUCATION

JAMES F. ROGERS, Consultant

Studies completed.—(1) The "organized" recess as carried on in elementary schools. Since their introduction, early in the seventeenth century, the mid-morning and mid-afternoon recess periods have been important events in the life of the school child. However, owing to many social changes which have come about, these brief periods for play have become troublesome in that the child has been unable to manage his own affairs as formerly. To preserve the recess period without having it degenerate into a nuisance, and to make it of most benefit, the child needs some instruction and direction in his playground activities. These being given, the recess period will largely take care of itself as it did in earlier days. The study made by this office considers the communities in which this organization is being carried out and the methods which have proved effective.

(2) The organized summer camp in higher education: A surprisingly large number of colleges and universities have developed summer camps in connection with their courses in engineering, geology, biology, botany, zoology, physical education, recreation, and forestry. The forestry camps should have been placed first historically and probably these hastened the further removal of classes to Nature's laboratory. The publication on this subject brings together for the first time information on this interesting development.

(3) State requirements concerning playgrounds and their uses: With increasing leisure the playgrounds of the country, and especially

school playgrounds, are becoming more and more important, and the use of the school playground after school hours is attaining prominence. We have investigated regarding the laws or regulations as to the minimum size of these grounds, their location and also as to their uses at other than school periods and by other than school agencies.

(4) Sanitation in small schools: Much progress is being made in providing healthful conditions in schools, but practice still lags behind knowledge. In a great many schools these conditions depend almost entirely upon the teacher, and she is not always informed as to what she can or should do along these lines. The publication on this subject is an attempt to present in simple language such knowledge as may be helpful to the teacher.

(5) State-wide trends in school hygiene and physical education: The teaching of physiology and hygiene has been carried on in this country for over a hundred years. History is always illuminating and a review of trends in this field is important. These were studied as reflected in laws, regulations, and in courses of study. Medical inspection is a development of this century but is in all stages of progress in the different States and communities. The State laws for medical inspection and for physical education are summarized in this study.

(6) Schools and classes for delicate children: "Open-air" schools for tuberculous or delicate children are a development of this century. No study of such schools or classes has been made since that by Kingsley and Dresslar in 1916. Meanwhile many changes affecting such schools have come about. These changes were followed, and present practices in the handling of delicate children have been investigated in this study.

Studies in progress.—(1) What is done in public schools for children with speech defects. Speech defects and especially stammering and stuttering are among the greatest handicaps both in school life and afterward. From 1 to 3 per cent of pupils have some sort of speech defect, but in most communities nothing is done about them. We are finding out what is done and what can be done along this line and how to go about it.

(2) Hygiene and physical education as required subjects in teacher-training institutions: The teaching of hygiene in elementary schools and often the teaching and directing of physical activities is the business of the grade teacher. If she is not properly trained these subjects will not be properly taught or maybe not taught at all. We are studying, as best we can at long range, what is being done in this field of teacher-preparation.

(3) Legislation for physical education and medical inspection: In connection with the White House conference on child health and protection a specialist of this office is investigating the present status of legislation in the above fields and is attempting to find out what legislation is most desirable.

(4) Present status of school health work: This is another investigation carried out by this office for the White House conference. No general investigation of what is being done locally regarding medical and dental work, health teaching, physical education, etc., has been made since 1923, and the comparison of the results of these two studies will prove of much interest.

(5) The physique of the child as affected by school life: Many statements regarding the influence of the school on the physical development, structure, and function of the school child have been made with little or no supporting evidence.

Addresses were made before the American Physical Education Association, the New England Health Institute, the State Directors of Physical Education, and at the University of Maryland.

INDUSTRIAL EDUCATION

M. M. PROFFITT, Consultant

Studies completed.—(1) The plans for the organization of industrial arts and the vocational industrial programs in four comparable cities were studied for the purpose of collecting data necessary for answering requests for information relative to the administrative organization of the industrial education division in a city school system, the types of schools and classes included, the program of courses, and the plans for supervision.

(2) Numerous requests were received for information concerning school courses offered in aviation. The requests came from two sources, namely, from individuals seeking opportunities for training in various phases of aviation and from schools interested in organizing courses in this subject. In accordance with the belief that aviation will play an important part in the transportation facilities to be developed in Alaska, the office of the Secretary of the Interior also requested information relative to the courses in aviation now offered in schools in the United States, with a view to using this material in the organization of aviation courses in Alaska. In compliance with these requests data were secured from various schools giving instruction along this line and a report was prepared for the office of the Secretary of the Interior which included a list of schools offering courses in aviation, descriptive statements as to specific types of work included in the instructional program, plans for the organization of the instructional material, a list of equipment provided for the courses, and a plan for the coordination of the instruction offered in aviation with other shop subjects such as auto mechanics.

(3) Frequent requests are made for a list of schools offering various kinds of trade and industrial courses. To meet the demand for this information a list of approximately 1,000 public high schools offering a total of more than 60 different kinds of industrial courses was compiled. The list was arranged according to courses.

(4) Grading the work done in industrial classes has been the subject of much discussion during the past few years. Not only do different schools use different grading systems, but standards for grading also vary greatly in different schools. Requests have been made by various schools that the Office of Education compile information on this problem. By means of a questionnaire form, supplemented by correspondence and conferences, a study was made of the grading methods used in approximately 100 public and private schools offering trade and industrial courses. A report was compiled giving data on the different grading systems in use, the grade standards for passing work, and the factors upon which grades are

based. An annotated bibliography on grading was also included. This study was published as a 20-page industrial circular of this office.

(5) On request of the American Vocational Association an outline of 10 conditions as tests of efficiency for a general shop program was prepared and mimeographed for distribution at the New Orleans meeting of that association.

Studies in progress.—(1) List of reading material for use in industrial schools and classes. More than 300 books so far have been examined for inclusion in a descriptive list of references to works comparable to the interest and ability levels of this class of students. The list will include references in biography, history, and social sciences with special application to the field of industry.

(2) Study of part-time programs in industrial education in several city school systems.

(3) Study of the organization of industrial education divisions of teacher-training institutions and their program of studies.

(4) The organization of guidance work in city school systems.

Cooperative undertakings.—Continued cooperation with American Vocational Association in a study of performance abilities in industrial arts for the junior high-school grades and in the preparation of programs for annual meetings.

DIVISION OF COLLEGES AND PROFESSIONAL SCHOOLS

BEN W. FRAZIER, Acting Chief

GENERAL FUNCTIONS OF THE DIVISION

The general functions of the Division of Colleges and Professional Schools include the collection and dissemination of information concerning the colleges, universities and professional schools of this country, including normal schools, junior colleges, and all other institutions of higher learning. The division functions largely in an advisory capacity. Included among its duties is the administration according to Federal law of the funds accruing from the Morrill land grant of 1862 and the appropriations under the Morrill-Nelson Acts of 1890 and 1907 for the benefit of the colleges of agriculture and mechanic arts in the several States. The staff of the division consists of four specialists and three clerical assistants.

1. Educational Surveys

Studies completed.—(1) Land-grant college survey. This study, one of the most comprehensive ever undertaken in the field of higher education, was authorized by Congress three years ago. An appropriation of $117,000 was made to defray the cost of the survey. The study was undertaken for the purpose of evaluating the accomplishments, present status and future objectives of the 69 land-grant institutions of the United States. In the course of the foregoing study 68 recognized authorities in the land-grant college staffs were employed in addition to the specialists of the Office of Education. A very extensive amount of original material was collected upon the

major phases of the activities of the institutions. Including a study of the graduates and ex-students of the institutions, the material collected amounted to approximately 500,000 pages of questionnaire returns. Returns totaling 37,342 were received from alumni and former students. Individual schedules containing complete data on the members of the staffs of the institutions were also secured, the number of returns amounting to 12,032.

The land-grant college survey report is now in the process of publication. In order that the original material may be made available to the land-grant institutions in the revision of their educational programs and administrative procedures, it is being preserved for further study by the institutions themselves, or by other interested agencies.

Studies in progress.—(1) Survey of State-supported higher institutions in Arkansas. The collection of data and field work connected with a survey of the State-supported institutions including four junior colleges, the State university, and two teachers' colleges, were completed during the year under the direction of the chief of the division with the assistance of regular members of the divisional staff, and of four recognized authorities not members of the Office of Education staff. The presentation of the report and its publication will be made during the latter part of 1930. (2) Survey of the State-supported higher institutions in Oregon. The final report of this survey will include a study of the University of Oregon, Oregon State Agricultural College, and three State normal schools. The findings will be presented to the State board of higher education in Oregon during the fall of 1930. In addition to the chief of the division and regular members of the staff, six authorities in higher education, not members of the Office of Education, participated in the investigation.

2. Research and Other Studies

Studies completed.—A statement on the condition of higher education in Georgia, with suggestions for a possible future policy, was prepared in typewritten form in response to a request of a committee of the University of Georgia Alumni Association. (2) A study of accredited higher institutions is now being printed as a bulletin. The publication contains lists of universities, colleges, and professional schools accredited by the national, regional, and State accrediting agencies, together with copies, or digests, of the requirements for accrediting employed by these agencies. (3) A report of the current statistics relating to enrollments, salaries, incomes, and budget requests of State universities and colleges, was issued as a mimeographed circular in December, 1929. A similar report relating to State teachers' colleges and normal schools is issued biennially. The last issue of this report was in January, 1929. (4) The annual report of the land-grant colleges was compiled and published in the bulletin, "Land-Grant Colleges and Universities." (5) A mimeographed study was completed on the financial support of colleges and universities.

Studies in progress.—(1) A study of scholarships and fellowships available and awarded in 1927–28 at institutions of higher learning will be published as a bulletin. A portion of the study concerning

scholarships and fellowships granted by land-grant colleges in 1927–28 was completed during the year and was incorporated in the report of the survey of land-grant colleges. The collection of data for the entire study has been completed. The report will probably be finished by the beginning of 1931.

3. Conferences; Organization of Group Research

The chief of the division participated in meetings of various groups in connection with the State surveys of higher education in Arkansas and Oregon, in a meeting of the Alumni Association of the University of Georgia, in a meeting of the Board of Regents of the State of Kansas, and in meetings of other educational groups.

4. Cooperative Undertakings

(1) A cooperative study of military education in colleges and universities was largely completed. (2) A study of the general program of engineering education in 150 institutions was virtually completed in cooperation with the Society for the Promotion of Engineering Education. (3) An outline of a cooperative study with an outside authority on the aims and objectives of graduate study was prepared and approved for further investigation and for publication as a bulletin. (4) Further progress was made on a series of cooperative studies with local universities on the subject of the requirements for the bachelor's degree. This series of studies has extended over a period of five years. (5) The chief of the division participated in the organization of a committee representing the three regional associations of university and college business officers, the Association of American Colleges and the Council of Church Boards of Education, the American Association of Collegiate Registrars, and the American Association of Teachers Colleges. This committee was set up to formulate principles to be followed in the organization and arrangement of financial and statistical reports of universities and colleges. The General Education Board financed the undertaking. The division is assisting in this study. (6) A divisional staff member assisted in the work of a committee of the board of regents of the University of Maryland in the reorganization of Princess Anne Academy. (7) Conferences were held with the officers and staff members of Concord State Normal School at Athens, W. Va., on the instructional and building programs of that institution. (8) A new program for Howard University was very largely completed in cooperation with the officers of the university. Problems considered include the reorganization of the educational and fiscal programs for a 20-year period. The findings are intended for the use of Congress and the board of trustees of Howard University. (9) Data concerning 12,000 staff members of land-grant colleges were supplied to the United States Bureau of Efficiency for a study of salaries.

5. Addresses and Miscellaneous

Addresses were delivered during the year by the chief or by staff members of the division to members of the United Typothetæ of America, meeting at Pittsburgh; to the faculty and students of Con-

cord State Normal School at Athens, W. Va.; classes at Howard University; various groups visited during the course of State surveys of educational institutions; members of the Association of Governing Boards of State Universities and Allied Institutions; the Association for the Improvement of Agricultural Education; the Home Economics Association; the Land-Grant College Association; the Association of University and College Business Officers of the Eastern States; and other groups.

DIVISION OF SPECIAL PROBLEMS

Mrs. KATHERINE M. COOK, Chief

The organization.—In conformity with the general reorganization of the Education Office, changes in organization, staff, and activities of the division were initiated soon after the beginning of the present fiscal year. The division of rural education, formerly concerned with rural education in the United States, became under the reorganization the division of special problems. The general functions now assigned to this division are the establishment and maintenance of research, informational, advisory, and field services as follows:

(1) Special education; that is, the education of deviates from the normal physically and mentally, including both unfortunate deviates, such as mentally handicapped or subnormal children; physically handicapped, as crippled children and those otherwise below normal physically; and fortunate deviates usually both physically and mentally and commonly known as "gifted" children. The work in this field is expected to compass also the place of mental hygiene in the general education program.

(2) The education of atypical groups. Developments in this field during the year were concerned with contemplated projects in the education of indigenous peoples in Alaska, and with initiating plans for a research and informational service concerned with special needs and problems in negro education in the United States.

(3) The third phase of the work of the division is concerned with special problems in rural education (administrative, financial, and instructional) where extension of equality of educational opportunity is not yet consummated.

The staff consists of three specialists and three secretarial clerks.

Progress during the year.—The first step in effecting the reorganization and carrying out policies resulting therefrom was an intensive and extensive study of the respective fields of education in which work was to be established with reference to the existing situation, particularly the immediate and pressing problems and the types of service which can most effectively be undertaken by this office and which it can and should be equipped to render. The second step was to map out tentative plans for an organization to carry on the desired services and for the gradual recruiting of an appropriate staff; the third to project projects based on immediate needs and particularly to establish an informational service in each of the new lines of work—demands for which immediately followed the commissioner's announcement of the several new undertakings.

Canvass of the situation as concerned with the special education of deviates from normality discloses this as a relatively new develop-

ment in public education on which school systems are seeking information and guidance, particularly along the following lines: (*a*) Appropriate State legislation which enables or assists local school systems to establish and finance special education and which provides for education of handicapped children in isolated and other communities unable to administer fully to their own needs; (*b*) administrative set-ups best adapted to establish and maintain a department or section of special education in systems of different sizes and under varying situations; (*c*) means of ascertaining the number of children in need of special education and the extent to which differentiation is desirable; (*d*) classification of pupils and organization of special classes; (*e*) adaptation of materials and techniques of instruction to the special needs of the several types of deviates.

During the latter half of the year available literature has been canvassed, the beginning of an informational service adapted to immediate needs set up, and arrangements made to secure the services of a specialist in the education of mentally handicapped children.

During the year a series of publications has been projected with the cooperation of specialists within as well as outside the office, of which three are published or in process of publication, as follows:

Bulletin, 1930, No. 7, Special Schools and Classes in Cities of 10,000 Population and More in the United States.

Bulletin, 1930, No. 11, Education of Crippled Children.

Bulletin, 1930, No. 22, Schools and Classes for Delicate Children.

There has also been initiated a series of articles describing the administrative organization, housing, equipment, and instructional provisions in representative school systems for the education of the handicapped. Two of the articles have appeared in School Life during the year. A representative from the division attended the meeting of the International Society for the Education of Crippled Children at Toronto and has made cooperative contacts with other organizations and institutions. The division has cooperated also with the work of the White House conference, particularly through membership on the committee for Special Education and the subcommittee on the Education of Handicapped Children in Rural Communities. A number of conferences have been attended and considerable material has been collected for the use of the committees.

In addition to establishing the research, informational, and other types of services for which the office is responsible in connection with the education of indigenous peoples, we have a special opportunity as well as a responsibility in that we now administer educational and medical service to the natives of Alaska.

Considerable time has been given to a study of the present situation and its needs. Plans have been consummated for an investigation of the native ability and characteristics of the natives of Alaska with a view to devising a series of tests which will form a basis for more intelligent procedure in the organization of a type of education consonant with their needs and abilities and designed to fit them more nearly for intelligent and productive citizenship in their native environment. Arrangements have been made for this study to be carried on by a specialist now in Alaska, working with a committee of professors of Stanford University. This study is financed by

private grants with the cooperation and assistance of this office. Plans are under way as the result of which it is expected that reorganization of schools, reclassification of pupils, and certain curriculum revisions will be initiated during the coming school year. Steps are contemplated also for reorganization of the supervisory activities and the establishment of a more practical type of in-service training for teachers.

Problems in negro education have been further varied and complicated by changing social conditions following the postwar period. In spite of the large exodus of negroes to northern cities, the crux of the problem is probably still in the Southern States. Recent compilations made in the office indicate that percentages of enrollment in public schools in 13 Southern States are 69.3 among negroes as compared with 83.8 among whites; that percentages of the two races in public high schools are 2.6 and 11.5 respectively; and that the average annual term is 18 days shorter in negro than in white schools. Data recently collected in the office and inquiries constantly being received indicate that availability of schools is still a pressing problem with the negro race.

Tentative plans for the organization of an informational service in negro education have been formed during the year, certain research projects based on preliminary findings projected, and a trained specialist in the field has been selected who will begin work in September.

The work of the division concerned with special problems in rural education has consisted in completing projects under way, preparatory to reorganization and staff changes, and in organizing and initiating new undertakings along lines conforming to the changed policy. Three members of the staff assigned to work in rural education the first half of the fiscal year were reassigned under the reorganization. Projects completed during the year and prior to reorganization include two studies of library conditions and service to schools in rural communities: A study of service under county auspices; and a study of State direction of such service. Two studies showing some results of centralizing schools in rural communities were completed; one describing a decade of progress in achieving school centralization, and one concerned with pupil progress as shown by age grade and retardation data collected from representative schools in 24 States. Other projects begun in the division looking toward curriculum reconstruction in rural schools are still under way in the office.

The reorganization of the office has placed particular emphasis upon research as a function. In keeping with this policy the division of special problems has furthered and initiated studies of research projects which look particularly toward the equalization of educational opportunities for children in rural communities. Among such projects is one which aims to obtain a representative picture of the extent to which various levels and types of education are available to rural children. The study was undertaken in cooperation with a committee appointed by the National Society for the Study of Education, and a chapter was prepared for the 1931 Yearbook of the society which will be devoted to rural education. Additional data and findings resulting from studies undertaken in this connec-

tion are now being prepared for a manuscript to be submitted for publication by this office. A number of educators representing State departments of education and professors in higher institutions in representative States cooperated in the collection of the information. Individual records of approximately 60,000 rural children, showing the distances their homes are from schools provided, attendance, age, school progress, and other data, together with an evaluation of the influence of distance upon their education, form the basis of the study. The chief of the division has acted throughout the year as a member of the committee of five appointed by the national society, responsible for the planning and preparation of the society's 1931 Yearbook on Rural Education.

Another research study completed during the year concerned itself with the smallness of the schools offering secondary education in rural communities. The purpose of this investigation was to make available on a nation-wide scale definite information to show the small enrollments and teaching staffs prevalent in rural high schools; where the schools are found; the educational problems incident to the smallness of these schools; and ways and means through which rural high school problems are being attacked and solved.

The extension to sparsely settled areas of opportunities for education on a secondary level entails many special and peculiar problems. The specialist in rural school problems has, at the invitation of the National Survey of Secondary Education, undertaken a comparative study of the status of secondary education in schools of various sizes. It is the intention of the survey to use this study as a background against which to compare and evaluate progress in rural communities of certain pioneer movements in secondary education.

There has long been a conviction among students of rural education that one of the chief causes of weakness in rural schools is the very low salaries paid to the teachers employed in them. Since there is no other agency interested in gathering nation-wide data showing the salary status of these teachers, and since accurate data of this type are needed, the Office of Education has periodically investigated this matter. The division of special problems has such a study in progress at the present time. Roughly speaking, a 50 per cent return from an estimated total of 350,000 rural teachers has been obtained to date and every effort is being made to compile and publish these data within the current year.

Another project undertaken by the division with the assistance of a staff member from the statistical division is a study of the financing of education in the State of Vermont. This study was undertaken at the request of the State commissioner of education and a State committee appointed by the governor, which is making an extensive study of rural life in Vermont. The study extends over a period of years and is financed by private grant. The division is working in cooperation particularly with the subcommittee on education, of which the State commissioner of education is secretary. A preliminary report of the findings to date was presented at a meeting of the Vermont Rural Life Commission held in Rutland, Vt., May 22 to 25. The complete report will be presented in November.

In view of the pressing need for and the meager provision so far made in the majority of the States for professional supervision of rural schools, the division is called upon to assist rural school administrators and supervisors in improving the quality of instruction, particularly through securing more and better supervision. A conference on rural school supervision in the Southern States, the fifth in this section called by the Commissioner of Education, was conducted at Peabody College, Nashville, Tenn., December 16 and 17, 1929, and was participated in by chief State school officers, State rural school supervisors, and county supervisors to the number of approximately 200, representing 13 States. Preparations are under way for a sixth annual conference of the Southern States which will be held in Arkansas in December, 1930. A study of the rural school principalship in the Southern States, prepared in the division and published as Pamphlet No. 9, Office of Education, Procedures in Supervision; a bulletin, Contributions of Supervision to the Improvement of Rural Schools, prepared in the division and recently submitted for publication; and a mimeographed circular containing addresses and studies prepared for the conference of Midwestern States held at Des Moines, Iowa, edited in the division, are other contributions of the year to the improvement of instruction in rural schools.

The division has cooperated with a number of organizations, committees, and institutions in the preparation of material such as study outlines, bibliographies, circulars, and the like, and in holding or participating in conferences. Among these the following are of importance: Information on rural school supervision prepared at the request of the National Congress of Parents and Teachers; outlines for the use of study clubs prepared for the American Association of University Women concerning conditions in rural schools in the United States, and their improvement. State meetings and conferences, or conferences sponsored by State officials, have been attended and addresses made in Iowa, Virginia, Michigan, Massachusetts, North Dakota, Indiana, Idaho, Pennsylvania, and New York. Addresses were made also at the meeting of the National Education Association at Atlantic City, at the American Country Life Association at Ames, Iowa, and at teacher-preparing institutions and meetings in several States.

The division has rendered frequent service in suggesting, criticizing, evaluating, reconstructing, and otherwise furthering the study of special educational problems on the part of committees and individuals engaged in research. Approximately 32 manuscripts have been critically reviewed and in some cases revised in the division during the year.

Publicity of problems and progress in rural education through the agency of the Rural Schools News Letter has been discontinued as a project of this office. In place of this activity, established publicity agencies are used, such as School Life, the United States Daily, journals of the State educational associations, etc. Special findings of this division which have news or publicity value are supplied to these agencies, and articles on special subjects expressly prepared for certain publications issue from the division from time to time.

DIVISION OF AMERICAN SCHOOL SYSTEMS

W. S. DEFFENBAUGH, Chief

When the Office of Education was reorganized under the present administration the city and rural schools divisions were abolished and a new division was organized to take over most of the work formerly done in these two divisions. This new division is known as the Division of American School Systems. Its chief function is to make studies of the problems of State and local school organization and administration, school finance, school legislation, kindergarten-elementary and secondary school organization and curricula, methods of instruction, and of other problems relating to elementary and secondary education.

In order to make studies in these various fields there were assigned to the division seven specialists and four secretarial clerks and stenographers.

Studies completed.—The following studies have been completed, some of which have been published and the others approved for publication:

1. Nursery schools in the United States. This study contains not only a list of nursery schools but an analysis of (*a*) the main purposes for which the schools operate, (*b*) number of days a week they are in session, (*c*) length of school day, (*d*) enrollment, (*e*) nursery school teachers and consultation staff.

2. Organization of supervisory units for kindergarten-elementary grades. An analysis of grade groups assigned to general supervisors in kindergarten-primary grades.

3. Kindergarten-primary education—a statistical and graphical study.

4. Current practices in the construction of State courses of study. An analysis of current State courses of study, educational bulletins issued for the use of teachers, State school reports, and statements of State educational officials has been made to discover what policies prevail in the determination of the elementary-school curriculum.

5. A decade of school consolidation with detailed information from 105 consolidated schools. Contains data showing the number of one-room schools and the number of consolidated schools from 1918 to 1928 for each of the States, data on transportation of pupils, and other facts relating to the consolidation of schools.

6. An age-grade study of 7,632 elementary-school pupils in 45 consolidated schools.

7. State aid for consolidation and transportation. Summarizes the provision for aiding in the consolidation of rural schools.

8. Digest of legislation providing for Federal subsidies for education. Includes grants for common schools, higher education, vocational education, etc.

9. Legal status of Bible reading and religious instruction in the public schools. A summary of constitutional and statutory provisions relating to Bible reading in the public schools and a digest of court decisions showing the interpretation of such provisions.

10. Public-school attendance ages in the various States. Shows age attendance required in regular, part-time, continuation, and

evening schools, and age attendance permitted for kindergartens, and regular and other types of schools.

11. Summary of recommendations contained in State school survey reports regarding State and local school administration. Summarizes recommendations of the reports of 12 State surveys made since 1920. Contains quotations regarding State and local administration of schools.

Studies in progress.—(1) Digest by subjects of the 1929 education laws for each of the States enacting school legislation in that year. (2) Digest and summary of legislation in force affecting public-school administration—State, city, county, and district. (3) Review of educational legislation for 1929 and 1930. (4) State educational equalization funds. (5) Types of taxes contributing to State general funds. (6) An analysis of provisions for school support in the various States. (7) Selection and appointment of teachers. (8) Outline, with directions, for making a self-survey of a city school system. (9) Educational value of building blocks. (10) An analysis of report cards for use in the elementary grades. (11) Case studies of kindergarten-elementary grade supervisors' programs. (12) The specialist in secondary education gave the major part of his time to the national survey of secondary education.

Reference materials.—In addition to studies of various problems relating to administration, the curriculum, etc., the following reference materials have been compiled: (1) An annotated bibliography of studies on consolidation and transportation in 1923–1929. (2) An annotated bibliography of studies pertaining to the county unit of school administration. (3) An annotated bibliography on child-study material for parents. (4) An annotated bibliography entitled "Recent Contributions to the Literature of Early Childhood Education." (5) An annotated bibliography of the literature relating to Federal subsidies for education. (6) List of courses of study available for distribution by city school systems. (7) Annotated bibliography of studies on the appreciation of pictures.

The following reference materials are in course of preparation: (1) Digest of theses treating of causes of pupil failures. (2) Digest of theses on the rating of teachers. (3) An annotated list of annual reports published by city school systems. (4) An annotated bibliography of recent studies pertaining to school finance.

Cooperative undertakings.—The principal cooperative undertakings were as follows: (1) The White House Conference on Child Health and Protection. Information has been collected and compiled for several of the committees, and a section of the report on the health curriculum was prepared for one committee. (2) Department of Kindergarten-Primary Education of the National Education Association. The specialist in nursery-kindergarten-primary education was president of the department and prepared a conference program on the topic "The Practicability of Activity Curriculums," and later edited the reports made by the division group leaders. These were published by the National Education Association under the title "Activity Curriculums at Work." (3) Subcommittee of the National Committee on Nursery Schools. In cooperation with this subcommittee a publication by the national committee was issued giving a series of minimum essentials for nursery

school education. (4) Conference of nursery school workers. The specialist in nursery-kindergarten-primary education was chairman of the program committee and assisted in the preparation of the report of the conference which was published by the national committee on nursery schools. (5) Washington Child Research Center. Cooperation with this center has continued. During the year an article entitled "Housing and Equipping the Washington Child Research Center" was prepared in cooperation with the center and published in School Life in December, 1929, and in January, 1930. Reprints were made, for which there has been a great demand. (6) National Committee on Research in Secondary Education. Cooperation with this organization begun in 1925 has been continued. A member of the staff is secretary of this committee.

School surveys.—Several of the specialists have either conducted or assisted in the making of school surveys. Four members of the division have been assisting in the survey of the schools of Buffalo, N. Y.

In September, 1929, the chief of the division made a survey of the school building needs of Grafton, W. Va., and several weeks later submitted a report to the board of education. The recommendations contained in the report will be carried out as soon as the city is ready to vote a bond issue.

The chief of the division and the chief of the statistical division in the fall of 1929 made a survey of the school building needs of Arlington County, Va. Shortly after their report was submitted the people voted bonds to carry out the recommendations of the survey staff.

In May, 1929, the chief of the division and the chief of the statistical division began a survey of the organization and of the financing of the schools of Huntington, W. Va. The report was completed in July, 1930. The expenditures for school purposes were analyzed and compared with the expenditures in other cities of comparable size. Several of the recommendations regarding organization were adopted soon after the report was submitted.

Miscellaneous.—The curriculum committee of the State of California granted the Office of Education permission to publish a course of study for kindergarten-primary grades, entitled "Teachers' Guide to Child Development," which the division specialists adapted to the use of this office. This course of study will replace Bulletin 1919, No. 16, "The Kindergarten Curriculum."

Each of the specialists delivered addresses before State teachers' associations, national educational organizations, local teachers' associations, or faculties and students of universities and teachers' colleges.

The specialist in nursery-kindergarten-primary education prepared an extensive article on "Plans and Equipment for Nursery-Kindergarten-Primary Education," which was published in the 1930–31 edition of the American School and University. One thousand reprints were furnished this office for distribution.

Hundreds of letters requesting specialized information were received. In order to answer many of these letters considerable research among various publications was necessary.

DIVISION OF STATISTICS

M. M. PROFFITT, Acting Chief

This division completed the following projects:

Statistics of teachers colleges and normal schools; statistics of universities, colleges, and professional schools; statistics of city school systems; statistics of public high schools; statistics of State school systems; statistics of private commercial business schools, 1928–29; statistics of education of the Negro, 1927–28; an age-grade study of 7,632 elementary pupils in 46 consolidated schools; statistical summary of education. Tabulations were made for bulletins on statistics of land-grant colleges for the year ending June 30, 1929, and also for kindergarten-primary education, a statistical and graphic study. A statistical study was made on expenditures in publicly controlled institutions of higher learning for 1927–28.

The studies now in progress are:

Statistics of public, society, and school libraries for year ending December, 1929; retardation of elementary pupils in cities; expenditures of privately controlled institutions of higher learning for 1927–28; and statistics for the biennial survey of education, 1928–1930.

The office cooperated with some committees and State departments of education in an effort to secure more uniformity in statistical reports on education and assisted, in some instances, school systems in revising their statistical forms. For example, there was cooperation with the National Council of State Superintendents and Commissioners of Education which met in Washington and devoted one session to a study of uniform records and reports. On request, suggestions were made for changes in the reporting systems of North Dakota, South Dakota, and South Carolina, two visits being made to Columbia, S. C., by one of the field agents. One member of the staff attended meetings of the Committee on Uniform Records and Reports of the National League of Compulsory Education Officials at Kansas City, Mo., and of the Council of State Superintendents and Commissioners of Education at Atlantic City, N. J.

The field agents have participated in the educational surveys of the State of Vermont, the city of Buffalo, N. Y., and the land-grant colleges.

DIVISION OF FOREIGN SCHOOL SYSTEMS

JAMES F. ABEL, Chief

The general purpose of the division of foreign school systems is to gather data about education in foreign countries and make it available to the people of the United States. In the process of gathering data during the year, the division initiated for transmittal through the Department of State requests for information about the municipal universities of England to be furnished the Greater Omaha Corporation at Omaha, Nebr.; six special schools of music in Italy; the school system of Uruguay; the general educational reform law and the statute of university education in Chile; five missionary schools in Chosen; various schools for foreigners in Shanghai,

China: the State school systems in Mexico; the social pedagogical institute at Hamburg, Germany; a report from each of the 17 consular offices in China on education in their respective districts; and education in the Dominican Republic. In addition, letters were written to several of the national offices of education abroad and to various school officials. Assistance was obtained from the legations of Albania, Belgium, Bulgaria, China, Egypt, Finland, Hungary, Italy, Yugoslavia, the Netherlands, Norway, Persia, Siam, Spain, Sweden, and Turkey, the Chinese Educational Mission, and various departments of the United States Government.

The foreign education periodicals that to the number of about 100 come regularly to the office were read, matters of interest and value were selected and translated from them, and steps were taken to obtain by exchange or purchase periodicals that began publication during the year. Among the larger pieces of translation were: The programs and courses of study for the secondary schools of Lithuania; Italian Law No. 8 of January 7, 1929, regulations and courses of study for a new kind of secondary school for general technical training in Italy; the laws relating to secondary education in Rumania; the laws relating to secondary education in Portugal; the programs of the secondary schools for girls in Hungary; and articles from German on posture defects. The total translations for the Office of Education were approximately as follows: Bohemian, 2,300 words; Bulgarian, 525; Croatian, 150; Danish, 1,375; Dutch, 1,400; Estonian, 350; Finnish, 450; Flemish, 700; French, 6,165; German, 16,395; Greek, 375; Hungarian, 12,580; Italian, 3,400; Latin, 475; Latvian, 375; Lithuanian, 8,500; Norwegian, 1,751; Polish, 4,750; Portuguese, 15,950; Rumanian, 11,575; Russian, 11,140; Serbian, 480; Spanish, 8,500; Swedish, 550; Ukrainian, 325; and White Russian, 275. Total from 26 languages, 110,811 words.

The division arranged and kept in order in the library all uncatalogued material on foreign education and the foreign periodicals. Mrs. F. E. Farrington presented to the office a well-selected collection of works on education in France.

For the purpose of maintaining contacts with persons and organizations interested in foreign and comparative education, the chief of the division gave six days to consulting with various agencies in New York, Trenton, Philadelphia, and Harrisburg; the assistant specialist attended the Eighteenth National Convention of the American Association of Collegiate Registrars at Memphis, Tenn.; and members of the division visited several sessions of the First International Congress on Mental Hygiene. Among the visitors to the division were educators from Brazil, China, France, Germany, India, Japan, and Sweden.

With respect to giving to citizens of the United States information about school conditions abroad, the division prepared for printing a bulletin on national ministries of education and a leaflet on the graphic presentation of statistics of illiteracy by age groups; arranged a circular on the programs and courses of study for the secondary schools of Lithuania; revised a manuscript for a bulletin on secondary education in Norway; and compiled that part of the land-grant college survey relating to foreign students. Requests to the

number of about 10 a week for teaching positions abroad were answered. For School Life articles were prepared on the school-leaving age in Great Britain, education in Sao Paulo, Brazil, and new elementary schools in Argentina; and for the United States Daily, articles on education in India and education in England. About 1,000 theses written by students in German universities were classified by subject; those dealing with education, psychology, and philology were kept for the office library and the others were sent out to schools and organizations that could use them to advantage.

Besides answering requests of various kinds for data about foreign schools, the division maintained what amounts to somewhat unorganized correspondence instruction in foreign and comparative education for 89 students, some of them working on graduate levels, in that field. This number represents a gain of 30 above the 59 that corresponded with the division in 1928–29. The topics on which bibliographies, and in some cases direction, were furnished included: Infant schools in England; school attendance in England, France, and Germany; teaching English in Porto Rico; Italian students in American schools; junior colleges in Montreal; the universities of South America; progressive kindergarten and primary education in Russia and France; universities of Latin America; rural education abroad; foreign commissions that have studied education in the United States; comparative education; secondary education in France; the social status of teachers in England, France, and Germany; education of Spanish-speaking children in the United States and Mexico; the educational influence of Grundtvig; the present status of the education of women; secondary education in New South Wales; the great public schools of England; teaching geography in foreign countries; character formation in its relation to moral instruction; law courses in the elementary schools of France; Alexander Bain; the history of education in the Orient; agricultural education in Denmark; the youth movement in Germany; the history of the universities of northern Europe; compulsory education in Latin America; primary education in South America, France, and Palestine, and for the political or geographical areas of Australia, Austria, China, Cuba, Czechoslovakia, Egypt, England, Germany, Greenland, India, Irish Free State, Italy, Japan, Latin America, Lithuania, Mexico, The Netherlands. Norway, Ontario, Palestine, Poland, Porto Rico, Scotland, South America, the Soviet Union, Sweden, and Switzerland. The division assisted the National Advisory Committee on Education in securing statements of those characteristics of education in the United States that distinguish it from education in other countries, and in arranging short accounts of bodies advisory to the national ministries of education abroad. It furnished considerable data for a study of secondary education in England that is being made at the University of Pennsylvania.

At the request of college registrars, committees of admission, and State departments of education, the division evaluated the credentials of foreign students in cases Nos. 1501–R to 2075–C, inclusive. This was a total of 575 cases for 1929–30 as against 481 in 1928–29 and 307 in 1927–28. The cases came from 66 countries as follows: Argentina, 2; Armenia, 1; Australia, 2; Austria, 8; Belgium, 6; Bolivia, 4;

Brazil, 3; British West Indies, 4; British Honduras, 1; Bulgaria, 12; Canada, 22; China, 53; Chosen, 4; Colombia, 1; Costa Rica, 2; Cuba, 5; Cyprus, 2; Czechoslovakia, 12; Denmark, 8; Dominican Republic, 1; Egypt, 5; England, 14; Estonia, 3; France, 18; French West Africa, 1; Germany, 58; Greece, 12; Guatemala, 3; Holland, 4; Honduras, 1; Hungary, 15; India, 14; Irish Free State, 13; Italy, 29; Japan, 19; Jugoslavia, 3; Latvia, 5; Lithuania, 7; Luxembourg, 1; Mexico, 13; Nicaragua, 5; New Zealand, 3; Northern Ireland, 2; Norway, 8; Palestine, 23; Panama, 2; Persia, 7; Poland, 27; Portugal, 2; Rumania, 7; San Salvador, 1; Scotland, 7; Siam, 2; Soviet Union, 36; Spain, 2; Sweden, 5; Switzerland, 11; Syria, 4; Tripoli, 1; Turkey, 5; Union of South Africa, 2; Venezuela, 1; Hawaii, 1; Canal Zone, 2; Philippine Islands, 13, and Porto Rico, 4. Sixty-one cases were reviewed and briefs were made of the entire 575 cases.

The requests came from 30 State institutions, 16 municipal colleges and universities, 3 State departments of education, 2 city school systems, 45 private institutions of university rank, 4 preparatory schools and junior colleges, 7 private foundations, 1 legation, and 12 from the persons holding the credentials. An American grammar school in Tientsin, China, raised the question of being accredited in the United States. This is important to the schools for Americans abroad. The request was referred to the standardizing agencies for colleges and secondary schools. Being accredited is important also to schools in the outlying parts of the United States. For the first time the list of Philippine schools accredited by the Philippine Department of Education and the University of the Philippines will be included in the bulletin on accredited secondary schools issued by this office. The director of education in Palestine sent in data about the Palestine matriculation examination and asked how the secondary schools of that country could be accredited here. The director was invited to arrange and send a concise statement about secondary education in that country in order that the office could make it available to interested institutions in the United States. Some such arrangement with Palestine is particularly needed for a large number of students are coming from there to America. The Hebrew Gymnasium Herzlia at Tel-Aviv sends more graduates than does any other foreign secondary school.

Translations for other offices were made as follows:

Office of the Secretary of the Interior, 1,645 words; Bureau of Pensions, 14,495; Bureau of Reclamation, 49,007; General Land Office, 775; National Park Service, 482; General Accounting Office, 270; Government Printing Office, 1,200; Patent Office, 100; total, 67,974 words. This represented the time of one employee for 30 days.

The present staff of the division consists of three specialists and one secretarial clerk.

The foregoing report of the Division of Research and Investigation is respectfully submitted.

Bess Goodykoontz,
Assistant Commissioner.

DIVISION OF ADMINISTRATION

To this division have been assigned all duties with respect to housing and equipment, personnel matters, budget and accounting, mails and files, and matters relating to the education and medical relief of the native races of Alaska.

Housing

The housing problem has been a difficult one for several years and up to the present time it has been impossible to secure sufficient space for the efficient conduct of the work of the office. The library is badly overcrowded and needs additional space for book stacks to accommodate the necessary additions to the book collections and to provide working space for the additions to the library staff already arranged for. Additional space is required also for desk room for use by the experts and specialists working on surveys authorized by Congress. To do their best work such experts should have the quiet necessary for intensive research and should not be compelled to work in overcrowded rooms. It should not be necessary to assign more than two research workers to rooms of 280 square feet.

Personnel

The total personnel under this office was 375 on June 30, 1930, of which number 111 were employed in the District of Columbia. Changes among this comparatively small staff are frequent, especially in the field service in Alaska. It is a difficult matter to retain persons in that service for any protracted period, due undoubtedly to the small salaries paid, to the isolation of a large number of the stations, to the lack of suitable companionship, and to the difficult work involved in endeavoring to advance the civilization of aboriginal races. Eight vacancies in the staff in Washington, D. C., occurred during the fiscal year, one by death and seven by resignation. Most of the persons resigning did so to accept better paying positions in other branches of the Government service or elsewhere.

Much difficulty and delay have been encountered in securing properly qualified persons for some of the technical positions in the office due very largely to the small salaries that could be offered for the qualifications and types of service required. For instance, the position of librarian has been vacant for almost two years and that of editor has been vacant one year. These positions were reallocated to higher grades recently and it is expected that appointments to both positions will be made in the near future from lists furnished by the Civil Service Commission.

Alaska

The administration at long range of affairs in Alaska is a difficult problem. During the year the responsibility of this office in connection with the reindeer industry in that Territory was transferred to the governor on the recommendation of the Commissioner of Education, so that this office retains administrative authority only

with respect to the education, support, and medical relief of the aboriginal races in Alaska.

The amount granted by Congress for the education and support of the natives of Alaska during the fiscal year 1930 was $580,400, and for their medical relief $171,780.

In order that the headquarters of administrative authority should be located as near as possible to situations demanding attention, the office of the Chief of the Alaska Division has been transferred from Seattle to Juneau, the purchasing of supplies, the making of arrangements for the transportation of appointees and of supplies, and the operation of the *Boxer* remaining as duties to be performed by the purchasing agent and office manager in Seattle.

During the fiscal year ending June 30, 1930, the Office of Education maintained in Alaska 93 schools with 195 teachers, an enrollment of 3,899, and an average attendance of 3,029, as is set forth in the following table:

Schools	Population of village	Number of teachers	Total enrollment	Average daily attendance
1. Akiak	176	2	42	19
2. Akutan	67	2	19	16
3. Alitak	80	2	16	12
4. Angoon	376	3	102	83
5. Atka	84	1	19	15
6. Barrow	250	3	85	80
7. Beaver	93	1	27	21
8. Belkofski	120	2	27	7
9. Bethel	191	2	57	53
10. Buckland	113	2	27	18
11. Chanega	90	2	24	13
12. Chitina and Copper Center	76	1	60	19
13. Circle	40	1	10	4
14. Cordova	140	1	32	21
15. Deering	150	2	37	31
16. Diomede	139	2	42	36
17. Douglas	120	1	25	19
18. Eagle	75	1	23	18
19. Eek	101	2	34	28
20. Egegik	50	2	21	15
21. Elim	92	2	45	42
22. Fort Yukon	150	2	41	29
23. Galena	64	1	16	11
24. Gambell	222	2	55	45
25. Goodnews Bay	120	2	23	21
26. Haines	225	3	89	67
27. Hamilton	65	1	22	20
28. Hoonah	513	3	94	80
29. Hooper Bay	170	1	40	30
30. Hydaburg	350	4	71	67
31. Igloo	155	2	33	26
32. Iliamna	44	2	15	12
33. Juneau	375	3	88	62
34. Kake	418	4	108	93
25. Kaltag	99	1	24	15
36. Kanatak	65	1	16	12
37. Karluk	166	1	39	36
38. Kashega	39	2	10	8
39. Ketchikan	350	3	99	80
40. King Island	168	1	45	40
41. Kivalina	95	1	30	22
42. Klawock	460	5	112	97
43. Klukwan	75	1	25	19
44. Kokrines	76	1	23	17
45. Kotlik	104	1	32	28
46. Kotzebue	300	2	52	41
47. Koyuk	108	2	36	32
48. Koyukuk	155	1	28	18
49. Kulukak	48	2	19	15
50. Metlakatla	462	6	125	108
51. Mountain Village	75	2	28	24
52. Noatak	250	2	63	59
53. Nome	240	2	60	41
54. Noorvik	249	3	70	58

Schools	Population of village	Number of teachers	Total enrollment	Average daily attendance
55. Nunivak	44	2	16	11
56. Old Harbor	90	2	40	37
57. Perryville	92	2	32	29
58. Petersburg	200	1	33	19
59. Pilot Station	81	2	26	20
60. Point Hope	200	2	35	27
61. Quigillingok	72	2	27	23
62. Quinhagak	150	2	44	21
63. Quithlook	200	2	65	40
64. Rampart	127	1	17	14
65. Russian Mission	50	1	12	9
66. Saxman	97	1	24	18
67. Selawik	335	2	67	48
68. Sevoonga	135	2	37	31
69. Shageluk	91	2	18	17
70. Shaktoolik	104	2	36	32
71. Shishmaref	210	1	60	47
72. Shungnak	189	2	46	31
73. Sitka	494	4	101	83
74. Stebbins	60	1	20	17
75. Stebbins	103	1	19	14
76. St. Michael	123	1	11	9
77. Tanana	72	1	34	12
78. Tatitlek	87	1	22	14
79. Teller	71	1	40	26
80. Tetlin	59	1	14	11
81. Togiak	86	1	23	18
82. Tundra	93	1	31	26
83. Tyonek	66	2	16	14
84. Ugashik	75	2	17	13
85. Umnak	115	2	28	20
86. Unalakleet	276	2	51	44
87. Valdez	53	1	18	14
88. Wainwright	175	2	50	38
89. Wales	113	2	54	34
90. Yakutat	250	2	56	41
Industrial schools				
91. Eklutna	100	11	92	82
92. Kanakanak		10	72	50
93. White Mountain	90	8	90	72
	14,106	195	3,899	3,029

Enrollment of pupils by grades: First, 1,639; second, 631; third, 467; fourth, 438; fifth, 309; sixth, 202; seventh, 112; eighth, 63; ninth, 22; tenth, 15; eleventh, 1; total, 3,899.

The expense of conducting the three industrial schools during the fiscal year, including the expenditures for salaries, supplies, and the construction and repair of buildings, was as follows: For Eklutna, $63,522.81; for Kanakanak, $43,702.87; and for White Mountain, $43,132.11.

Preliminary steps have been taken toward the establishment of an industrial boarding school for the natives of southeastern Alaska. The site selected for this school is a tract on Shoemaker Bay, 4 miles south of the town of Wrangell, including approximately 1½ miles of water front with an average width of one-half mile. The complete estimate contemplates the erection of a group of eight buildings. The $71,000 available for expenditure during the fiscal year 1931 will be used in preparing plans, surveying the tract, clearing the land, and in erecting the principal school and dormitory buildings in so far as the appropriation is sufficient to cover these projects.

Provision has been made for the opening during the next school year of day schools at Akiajak, a village on the Kuskokwim River, 12 miles below Akiak, with a population of 170 and an available school population of 64; at Nondalton, 20 miles from Iliamna Lake,

with a population of 89 and 20 children of school age; and at Tuliksak, on the Kuskokwim River, 40 miles above Bethel, with a population of 166 and 48 children of school age.

To provide a home for orphans and other young children of preschool and early school age, an orphanage, with a staff consisting of a matron, an assistant matron, and a cook, has been established in one of the former Fort Gibbon buildings, at Tanana, which have been transferred to the Office of Education. To this institution will be taken homeless children of preschool and early school age who have hitherto of necessity been cared for in the industrial boarding schools at Kanakanak, Eklutna, and White Mountain. This will have the desirable effect of restricting attendance at the industrial schools to pupils of suitable age.

The scope of the medical work performed by physicians, nurses, and hospital employees is indicated by the following table:

Place	Number of employees	Visits to homes	Total treatments given	Total expense
1. Village nurses				
Angoon	1	438	1,881	$1,866.57
Bethel	1	175	4,528	2,436.94
Chitina	1	308	2,458	2,697.94
Eklutna	1	61	48	2,089.45
Hoonah	1	1,056	3,970	1,715.45
Hydaburg	1	917	4,815	1,714.13
Kake	1	788	2,712	1,959.29
Karluk	1	233	950	1,652.60
Klawock	1	513	3,127	2,093.39
Metlakatla	1	774	4,899	1,856.43
St. Michael	1	110	600	1,653.09
Shishmaref	1	74	479	1,786.32
Sitka	1	189	2,708	1,958.41
Unalakleet	1	103	1,730	2,184.17
White Mountain	1	120	2,694	2,885.57
Yakutat	1	1,217	3,183	1,955.48
2. Part-time physicians				
Cordova	1	49	733	1,788.70
Nome	1	1,873	910	3,986.65
Unalaska	1	255	2,494	3,740.08
3. Hospitals				
Akiak	6	406	845	17,995.73
Juneau	8	184	18,506	18,319.37
Kanakanak	6	455	992	17,622.06
Kotzebue	5	76	188	8,922.83
Noorvik	2	1,576	6,384	2,927.88
Nulato	2	768	619	4,397.73
Tanana	7	320	900	15,912.88
Yukon Medical Boat	6	232	4,055	9,043.73
Total	61	13,270	77,408	137,162.87

The physicians performed 782 operations during the year. In addition to the work performed by physicians and nurses, as stated in the foregoing table, the teachers in many villages where no physician or nurse is stationed rendered first-aid relief to the natives.

The balance of the appropriation for medical relief in Alaska was expended for medical supplies distributed among the teachers in the outlying villages, for the traveling expenses of physicians, nurses, and patients, and for freight on supplies.

The staff of the administration division in Washington consists of 11 persons.

Respectfully submitted.

L. A. Kalbach, *Chief Clerk.*

EDITORIAL DIVISION

The whole number of documents printed in the fiscal year ended June 30, 1930, was 72, of which 36 were bulletins, 12 pamphlets, 1 leaflet, 1 report of the Commissioner of Education, 10 numbers of School Life, and 12 miscellaneous publications. Of the bulletins issued, 7 were chapters for the Biennial Survey of Education.

The allotment of funds for printing was $2,000 more than in 1929. The amount allotted was insufficient in that there were statistical and research manuscripts on hand, ready for the printer, for which the cost of printing was conservatively estimated at $6,000 over and above the amount available for printing.

The present staff consists of seven persons, there being a vacancy in the position of editor in chief.

HENRY R. EVANS, *Acting Chief.*

LIBRARY DIVISION

The Bibliography of Research Studies in Education for 1927–28 was issued as Bulletin, 1929, No. 36, and the Bibliography for 1928–29, which will be issued as Bulletin, 1930, No. 23, was sent to the printer. As a result of the conference on cooperative research held at Atlantic City, N. J., in February, 1930, preliminary arrangements have been made to issue from time to time a list of research studies in education undertaken by city school systems, including studies recently completed, those still in progress, and those contemplated. Changes and enlargements in the content of the bulletin, etc., have necessitated adding an assistant to help with this work during the coming year.

The Record of Current Educational Publications was issued more frequently during the past year than for some years in an effort to meet the demand for publishing the material while current. Three numbers were published: Bulletin, 1929, No. 37, July to September, 1929; Bulletin, 1930, No. 4, October to December, 1929; Bulletin, 1930, No. 15, January to March, 1930, now in the hands of the printer. The issue for April to June, 1930, is now in preparation. The index to the series has been resumed and will be found in the last issue of each calendar year.

A specialist in school libraries has been added to the library division to devote full time to investigations of school library conditions. Bulletin, 1930, No. 6, State Direction of Rural School Library Service, has been published; Bulletin, 1930, No. 20, County Library Service to Rural Schools, and Pamphlet No. 11, School and County Library Cooperation, are now in the hands of the printer.

Members of the division have contributed a page of "New Books in Education" to each number of School Life during the past year, as well as articles on subjects connected with libraries, lists of summer meetings of educational associations, etc. Articles have also been contributed to the United States Daily and other periodicals. There were prepared for the Educational Directory lists of library schools, State library commissions, educational associations—State, regional, and national—with names of new officers and place of next meeting, and a list of the educational periodicals received in the

office with address of publisher. The division cooperated with the statistical division in the preparation of the bulletin on Statistics of Public, Society, and School Libraries which is now in progress.

The division is cooperating with the American school systems division in preparing a list of city school reports, with annotations as to significant material.

On account of the heavy increase in permanent material received in the library, it has been necessary to add another cataloguer to assist in cataloguing it. The cataloguing section continues to cooperate with the Library of Congress by preparing copy for catalogue cards to be printed and supplied to librarians throughout the country by the card division of that library.

In addition to the type of work referred to, the division has assisted the office specialists, and others outside, with book loans, inter-library loans, especially theses for the use of the major educational survey groups; with information on subjects connected with education and libraries by means of correspondence and in person; with a bibliographical service which includes the preparation and sending out of bibliographies on many subjects in education in answer to requests. The past year has seen increased activity in this field, hundreds of such lists having been distributed in typewritten, mimeographed, and printed form.

The division has also maintained an advisory service to those interested in organizing school libraries and public libraries in new fields and furnishing book lists and other information for this purpose.

The library has been compelled by lack of space to remove valuable books and other material from its shelves and box them, thus rendering them inaccessible for reference. Other material in the near future must be removed because of overcrowded conditions. This has made the administration of the library and its service more than usually difficult.

At the present time the library staff consists of 4 persons in professional grades, 4 in subprofessional grades, and 2 clerical assistants. The position of librarian still remains vacant.

MARTHA R. MCCABE, *Acting Chief.*

SERVICE DIVISION

The staff of this division consists of eight specialists and seven clerical assistants.

I. Research Completed

Adult education.—A study entitled "College and University Extension Helps in Adult Education, 1928–29," was issued as Bulletin, 1930, No. 10. This study has resulted in making available information as to what help may be had through extension service from 423 institutions of higher learning in all parts of the United States. Colleges and universities, during the past year, have endeavored to extend their services to a larger number of persons beyond their walls. The development of the radio has carried the voice of the college instructor to all parts of the country. Wherever the mails go university extension may be had, and, where a sufficient number of persons

in a community desire to study the same subject, in most cases an instructor of some college or university may be found to guide them. Under certain conditions, work done by extension through correspondence or class work may be credited toward a degree. The amount of credit that can be earned through extension work varies among institutions. In general, institutions that offer services of this nature permit from one-fourth to one-half of the work necessary for a bachelor's degree to be earned by correspondence. There is a tendency to be more liberal in this regard toward extension-class work. Many institutions offer through extension a great variety of work for which no credit is granted.

The following studies also were completed: (1) A study of play and play materials for the preschool child in the home. There is included a summary of what psychologists have to say on the value of toys; a list of suitable toys for various age levels, and a bibliography. (2) A study of problems in adolescence for parents. This study has been printed as Reading Course No. 34. The course was made so that parents may be helped in meeting the behavior situations which arise when their children reach adolescence. (3) A study of literature pertaining to elementary nature study. This study has been printed as Reading Course No. 35.

Commercial education.—Revised circulars on collegiate courses in accounting, advertising, banking and finance, foreign trade and foreign service, insurance, marketing and merchandising, organization and management, realty, and transportation; circulars on cooperative part-time and extension courses; and directories of the collegiate schools of commerce and bureaus of business research. This set of 13 circulars reports on the number of courses offered, number of instructors, number of students enrolled, number of students majoring in each field, and the names of the curricula offered by the different institutions. The reports reveal a large increase during the past five years in enrollments, facilities, the number of bureaus of business research, and the number of collegiate schools of commerce.

A study of the administrative control of commercial teacher training in the 95 colleges and universities that maintain schools of education and commerce. The report was prepared for the Yearbook of the Eastern Commercial Teachers Association. This study shows that in 38 of the 95 institutions there was no commercial teacher-training curriculum, in 7 the curriculum was primarily under the control of the school of commerce, in 18 under the school of education, and in 32 under the joint control of the schools of commerce and education.

Compiled lists of: (1) Follow-up studies of drop-outs and graduates from the commercial curricula; (2) Commercial occupation surveys; (3) Commercial education surveys; (4) Analyses of office and store occupations; (5) Studies of standards of achievement in schools and in offices; and (6) Colleges and universities that grant credit for collegiate courses in shorthand and typewriting.

Prepared report on the significance of commercial occupation studies for the proceedings of the National Education Association.

Prepared for the proceedings of the Conference on Research in Commercial Education, State University of Iowa, Iowa City; (1)

Review of researches on standards of achievement in shorthand and typewriting; and (2) A report on a State program for commercial education.

Prepared an appraisal of secondary commercial education for the proceedings of the Ohio State Educational Conference, Columbus.

Elementary school projects.—Study of the history and geography of the Oregon Trail and the living conditions of the pioneers in the covered wagon caravans.

Home economics education.—(1) A study of the home economics work offered to boys in the various sections of the United States and on various school levels and to college men was made and is reported in Pamphlet No. 4, 1930, entitled "Home Economics for Boys."

(2) Home economics instruction in higher institutions, including universities, colleges, teachers colleges, normal schools, and junior colleges, 1928–29, is reported in Pamphlet No. 3, 1930. This study reports all the institutions of higher learning offering a 4-year curriculum in home economics leading to a baccalaureate degree in that subject and universities, colleges, normal schools, teachers colleges, and junior colleges offering courses in home economics but not granting a degree in that subject. It also gives the location of each institution, the number of courses offered, teachers employed, students enrolled, and the name of the head of the home economics department.

(3) Basic educational principles used in home economics curriculum building in secondary education of 100 or more representative cities of the United States.

Radio education.—The Advisory Committee on Education by Radio appointed by the Secretary of the Interior made a national survey during the last half of 1929. The Commissioner of Education was chairman of the committee and its work was closely associated with that of the Office of Education.

The purpose of the survey was indicated by the Secretary of the Interior in these terms:

"The possibilities of radio as an educational tool appeal to educators, broadcasters, manufacturers, and the public at large. This general interest led to a conference in my office at Washington on May 24, 1929. Those present by unanimous vote requested that I should appoint a committee to make a thorough fact-finding study of the situation."

The report of the committee indicates that commercial groups are using all the available broadcasting channels and sharing less than one-third of them with stations devoted primarily to educational and civic purposes. Broadcasting stations owned and operated by States, municipalities, schools, colleges, and universities are disappearing rapidly. Commercial broadcasters are devoting much time to educational programs but granting them no certain tenure of the air. The financial interests of the commercial stations control their policies. Amusement programs are attracting the largest audiences. The sale of time for advertising is the main source of revenue. Educators have formulated no national policies concerning the conservation or use of radio channels. Neither Congress nor the Federal Radio Commission knows whether the educators of the country wish a proportion of the limited and very valuable radio channels reserved for educational stations, or whether they are content to leave this "edu-

cational tool " entirely in the control of broadcasters who are operating radio stations primarily for their own profit.

One of the recommendations of the Advisory Committee is that there be established in the Office of Education, Department of the Interior, a section devoted to education by radio. The Payne fund offered the services of its radio counsel and enough money to pay his travel expenses and secretarial service for the period of 15 months which must elapse before the Department of the Interior could include the radio section in its budget. The offer was accepted, and the work started by the Advisory Committee was continued.

A study of the report of an investigation made by the United States Senate and statements made by a member of the Federal Radio Commission brought the information that a world monopoly of radio was claimed by a commercial group, and that a suit had been instituted by the Attorney General of the United States to test the legality of the activities of this group. New legislation was being formulated by Members of Congress who expected to bring it up for action at the next regular session of that body. Efforts were being made by the commercial group claiming the monopoly of radio to have this new legislation relieve commercial broadcasters from certain responsibilities which must be assumed by public utility corporations so that these broadcasters would be free to accept or reject speakers or programs at their own pleasure, and to exercise the right of censorship over information broadcast from their stations.

The records of hearings on applications before the Federal Radio Commission show that commercial broadcasting stations, in many instances, applied for time, channels, and power which could be secured only by taking them from existing stations owned by States and institutions of higher learning. Attempts to restrict commercial stations were met by the argument that restriction was equivalent to confiscation of property, although the licenses granted to stations by the commission carried no right to renewal.

The Office of Education made available to the educators of the country, and to other interested persons, such information as was gathered. The Commissioner of Education is planning a conference in the fall of 1930, at which consideration will be given to the place of education and similar interests in broadcasting, and what legislation, if any, is needed to safeguard these interests.

School-building problems.—A study entitled " Changing Conceptions of the School-Building Problem " was completed and published as Bulletin, 1929, No. 29.

There was completed an abstract of the laws governing activities of State departments of education in regard to schoolhouse planning. A tabulation was made of these activities as given in the laws and various reports and a 12-page questionnaire prepared on the activities of State departments in regard to schoolhouse planning.

Physical education.—The work in this field which now forms a part of this division has been included in the report of the assistant commissioner.

II. Research in Progress

Adult education.—(1) A study of types of educational training most effective in State and Federal prisons. (2) Plans of organization in States and cities which are most effective in reducing

illiteracy; the amount of instruction necessary so that adults of various ages may learn to read well enough so that they will read newspapers, periodicals, and books as a part of their daily routine; methods of instruction best adapted for adults; what training is necessary for regular day-school teachers so that they may become effective teachers of elementary subjects to adults; the best textbook material for the elementary instruction of adults. (3) The effectiveness of programs designed to reach the millions of boys and girls who are of high-school age and who, for various reasons, are not in high school. This involves a study of what continuation and cooperative schools are doing as well as what the regular schools are able to do by adjusting their class hours so that students who wish to have part-time employment may do so. (4) A controlled experiment to ascertain (*a*) to what extent parents are willing to supplement school instruction by home instruction; (*b*) what effect home instruction has upon the progress of children in school; (*c*) what effect instruction by parents may have upon the conduct of children.

The following studies also are in progress: (1) Research and instructional programs of agencies engaged in parental education. This involves the assembling, organizing, and evaluating of courses given for credit, noncredit, correspondence, and study groups. (2) Growth of parent-teacher associations. Programs, plans, records, and other descriptive material are being assembled, analyzed, and interpreted.

Commercial education.—(1) A study of commerce and business education in the junior colleges pertains to the objectives, organization, present practices, and extent of offerings in junior colleges. (2) The purpose of another study is to reveal the present state of commercial teacher-training curricula in the different types of institutions. It includes a study of the entrance and graduation requirements, the organization and length of the curricula, provisions for obtaining supervised business experience, the extent of the offerings in the principles and supervision of commercial education, subject matter and methods courses, practice teaching, and other pertinent factors. (3) Standards of achievement in shorthand and typewriting. The purpose of the study is to gather data regarding various practices in the grading of test papers, sources from which test material is obtained, length of tests, nature and difficulty of test material, and speed and accuracy requirements. (4) Experiences and practices regarding training for business in all types of part-time education in the United States. It includes a study of the needs, types of organization, offerings, coordination of school courses with employment, programs for guidance and placement, and examples of effective programs.

Elementary school projects.—A study of material for projects on nature study topics and on George Washington and his times.

Home economics education.—Cooperative studies with school systems and institutions of higher learning: (1) The determination of the minimal essentials of the home economics curriculum to meet the activities, interests, and needs of the pupils. (2) The development of criteria for judging the effectiveness of home economics teaching regarding the above. (3) A study of the extracurricular activities

of students trained in home economics as compared with those not trained in the subject. (4) Development of criteria to judge the effectiveness of a home economics department. (5) Development of criteria to evaluate the administration of home economics in our public schools.

Radio education.—A continuous study is made of the use of radio in schools, colleges, and universities, and in informal education. Reports of experiments, evaluations by educators, and other material are gathered.

School-building problems.—A study of the activities of State departments of education in regard to schoolhouse planning.

III. Educational Surveys

Early in the year 1930, the Buffalo Municipal Research Bureau (Inc.) requested the United States Office of Education to make a survey of the schools of Buffalo, N. Y. The board of education of Buffalo joined in this request. Two members of the staff of the Office of Education were sent to Buffalo to look over the situation. Upon their return they recommended that the Office of Education undertake the survey provided the scope of the survey should be limited to the attempt to answer the questions asked by the Buffalo Municipal Research Bureau (Inc.) and the Board of Education. Outstanding educational leaders were requested to aid the office in three distinct fields of the survey, namely, school administration, teacher-training, secondary education. Nine members of the staff of the Office of Education visited Buffalo, some of them more than once, and they have gathered considerable information. Members of the staff of the Office of Education have collected, by visits and by use of the mails, information from the 12 or 13 cities with which Buffalo may be compared. It is hoped that this study may be completed by December, 1930.

A school-building survey was made of Warwick, R. I., schools at the request of the school committee of that town. A school-building program for a 7-year period was worked out, one on the traditional plan of school organization and one on the platoon plan. The preparation of the report on this survey is in progress.

At the request of the Board of Education of the District of Columbia, a survey was made of the Park View School building.

IV. Conferences

Adult education.—The large number of conferences to which the specialist in adult education has been invited during the year gives evidence of the increased interest in adult education. Probably the most significant of these conferences were those held with officers of the National Education Association on many occasions. That organization has undertaken to awaken the American people to the importance of using their increasing leisure time for the enrichment of human life. In this program it is realized that the schools can play a very important part, as there probably are more adults who need what even the elementary schools have to offer than there are children within the limits provided by the compulsory school attendance

laws of the various States. Many of the adults have not had sufficient education to adjust themselves to the economic conditions of our day.

The great importance of afternoon and evening schools for adults has been brought to the foreground in many conferences. For this work of evening schools, buildings, equipment, and teachers are available. Teacher training and teacher supervision will be provided when there is a proper demand for them.

Conferences with organizations other than the National Education Association have made it evident that laymen as well as educators have arrived at the conclusion that the education of parents probably presents the greatest educational opportunity in America to-day. Much of this education will be informal, and some of it will be self-directed. However, the first need of millions of adults is that they may learn to read well enough so that they will read and also learn what to read in order to profit by informal education.

The specialist in adult education has been called into consultation by Federal and State officials in regard to the education of prisoners. It now is realized more than formerly that men in prisons should be trained in some skilled trade and that the routine work of prisons offers an excellent opportunity to give training in 30 or 40 trades in which employment most easily is found. These trades motivate a considerable amount of elementary, academic instruction. It has been discovered that academic instruction thus motivated appeals to prisoners with much greater force than does academic work not related to the work for which they are training.

Home economics education.—The specialist planned, conducted, and reported five national home economics conferences. Three of these were under the auspices of the Office of Education and two were held in conjunction with the National Education Association. These conferences were held, respectively, at Boston, Mass., July 1, 1929; Washington, D. C., December 6 and 7, 1929; Atlantic City, N. J., February 24 and 25, 1930; Cincinnati, Ohio, March 21 and 22; and Columbus, Ohio, June 30, 1930.

The Boston conference was held in conjunction with the annual meeting of the American Home Economics Association. A full report of this conference is contained in Home Economics Letter No. 9.

At the Washington, D. C., conference The Place and Function of Home Economics in American Education was discussed. The purpose of the conference was an effort to see through some of the problems of this very important subject.

The Cincinnati, Ohio, conference considered home economics from the angle of the economist, sociologist, psychologist, and home economist. This conference recommended to the Commissioner of Education that cooperative homemaking studies be undertaken for the purpose of strengthening the course of study, the teaching methods and supervision; also that a committee develop criteria for judging the effectiveness of home economics administration and the work of the home economics departments. For this purpose the commissioner has appointed committees composed of home economists, city and State superintendents and principals of schools, deans of education, homemakers, and presidents of universities. Also cooperation

has been established with some of the graduate schools of education to assist with the details of the studies.

Radio education.—The Advisory Committee on Education by Radio has been represented at meetings of land-grant institutions and other organizations when they have met to consider radio education problems. This committee has endeavored to help establish proper cooperation between broadcasting chains and educators. The committee sent a representative to assist with the first institute of education by radio and with the first course in the administration of education by radio, held at Ohio State University in June, 1930. This committee is represented on the National Advisory Council on Radio in Education, which was appointed by the American Association for Adult Education.

School building problems.—At the request of the Regional Councils of the New England, New York, and Middle Atlantic States of the National Advisory Council on School Building Problems, conferences were held by the specialist in school building problems in April, 1930, with each of these councils.

The first annual conference of the National Advisory Council on School Building Problems was held in Atlantic City, N. J., February 26, 1930. At the conclusion of the conference each region, in accordance with the suggestion of Commissioner Cooper, elected its own chairman for the year 1930–31. In some cases secretaries also were elected.

In accordance with the request of the officers of the National Association for the Study of the Platoon or Work-Study-Play Plan of School Organization, the specialist in school building problems assisted that organization in its research work on platoon schools, and also assisted the national research committees of that organization to plan their programs for the annual conference of the association.

V. Cooperative Undertakings

Adult education.—There has been cooperation with the Bureau of Home Economics of the United States Department of Agriculture in sending out a nation-wide inquiry on parent education in all its aspects; with the White House Conference on Child Health and Protection in making a study of play and play materials for the preschool child; with the National Congress of Parents and Teachers in its campaign to prepare children for their first entrance into school free from remediable physical defects; with the National Education Association, the American Association for Adult Education, National Congress of Parents and Teachers, the National University Extension Association, and the American Library Association in connection with the National Committee on Home Education; with the National Congress of Parents and Teachers in the preparation of a chapter on The Federal Government and Parent Education, for the Handbook on Parent Education.

Commercial education.—Cooperated with the Motion Picture Division, Department of Commerce, in a nation-wide study of the use of motion pictures in the schools. The purposes of this study are to gather data regarding the experiences, present practices, and facilities in the use of motion pictures for educational purposes.

Elementary school projects.—(1) With the American School of the Air, prepared and distributed 1,000 questionnaires inquiring of teachers and pupils their reaction to radio programs. A report giving the findings of this study has been completed. (2) With the Oregon Trail Memorial Association by serving as one of the judges of the Oregon Trail Essay Contest. (3) With the George Washington Bicentennial Commission. This involves the preparation of a bulletin on George Washington and his times for the use of teachers and pupils in celebrating the bicentennial.

Home economics education.—Assisted three different committees of the White House Conference on Child Health and Protection; contributed to the survey on The American Home made by the General Federation of Women's Clubs; contributed an article on home economics equipment for the third annual publication of The American School and University; contributed an article to the Child Welfare Magazine, April, 1930, in conjunction with the Better Homes of America program; acted as home economics adviser in the revision of the West Virginia State home economics course of study.

VI. Miscellaneous

Adult education.—For the Secretary of the Interior the specialist in adult education carried on correspondence and interviews necessary for conducting an experiment to ascertain what effect the radio may have upon the well-being and attitude of isolated families who are illiterate or near illiterate. One hundred radio sets have been donated to 12 colleges and universities. The departments of sociology of these institutions are to place the radios and study the effects. A few of the sets are to be placed in homes of foreign-speaking persons in a large city. The experiment probably will be continued through a period of several years, but it is thought that some very interesting results may be noted during 1930–31.

Fifty of the radio sets used in this experiment were donated by the Radio Corporation of America, at the request of the Chamber of Commerce of the United States, and 50 sets were donated by the Grigsby-Grunow Co.

Twelve parent education letters relating to problems common to the home and reading courses covering a wide variety of subjects were issued during the year.

Commercial education.—Completed the arrangements for American participation in the International Congress for Commercial Education at Amsterdam, Holland, September 2–5, 1929. Leaders in secondary and collegiate education for business were nominated by the Commissioner of Education and designated by the President of the United States as official delegates of the United States Government to that congress. A report of the congress was published in Vol. XV, No. 3, of School Life for November, 1929.

Respectfully submitted.

L. R. Alderman, *Chief.*

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UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
OFFICE OF EDUCATION
WILLIAM JOHN COOPER, Commissioner

ANNUAL REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR THE

YEAR ENDED JUNE 30

1931

UNITED STATES
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THE OFFICE OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIAM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D., LL. D.
July 1, 1906, to June 30, 1911

PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to August 31, 1928

WILLIAM JOHN COOPER, ED. D., LITT. D., LL. D.
February 11, 1929

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ANNUAL REPORT OF THE COMMISSIONER OF EDUCATION

Department of the Interior,
Office of Education,
Washington, D. C., July 31, 1931.

Part I.—ORGANIZATION AND FUNCTIONS

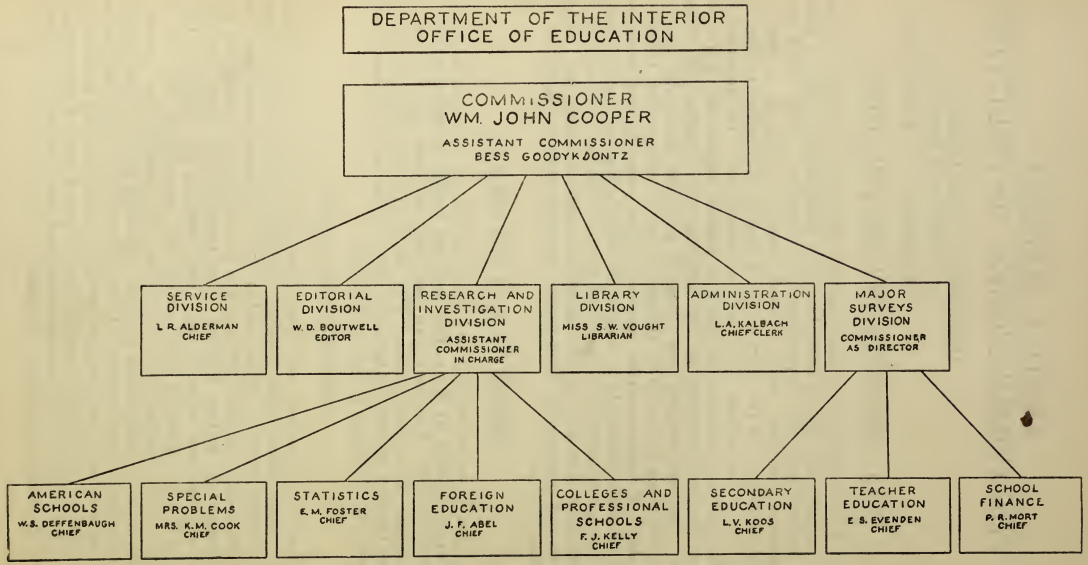
Sir: A year ago your commissioner referred to the year ending June 30, 1930, as "one of transition, of reorganization, and of planning to meet new and larger issues in education." He would now characterize the year which closed June 30, 1931, as a year of earnest endeavor on the part of the Office of Education to find its real place in the scheme of American education. The statement of general policy enunciated in the last annual report and approved by you has been accepted by the Congress as a program for future action. For the Seventy-first Congress provided authority and the funds necessary to do three things: First, to relieve the Office of Education of administrative responsibilities; second, to supplement our small staff sufficiently to render its fact-finding and data disseminating functions more effective; and third, to enable it to develop its research activities through nation-wide studies running for limited periods and manned by high-grade research experts employed for part-time service.

ORGANIZATION OF THE OFFICE

Last year's report carried two charts showing the organization of the former Bureau of Education and the tentative organization of the present office. The accompanying chart indicates graphically the organization as it now exists. The work of these divisions is explained below with brief comments on personnel and additions which appear to be necessary in the near future.

ADMINISTRATIVE DIVISION

A year ago I pointed out that all administrative responsibilities of the commissioner were handled through the chief clerk. Since the last report we have, under authority of Congress, transferred the educational and medical services for the natives of Alaska to the Commissioner of Indian Affairs. This transfer took from our office the veteran assistant chief of the Alaska service, Dr. William Hamilton, and our assistant chief clerk and accountant, Mr. D. E. Thomas. This change in the chief clerk's responsibilities, however, has been offset by the coming into full operation of the major surveys program of the commissioner. It has extended his responsibility in regard to personnel and budget control. It also makes necessary a larger volume of supplies, and the purchase and care of more equipment and contacts with the duplicating and machine statistical operations have been considerably increased.



ORGANIZATION OF THE OFFICE OF EDUCATION, JUNE 30, 1931

EDITORIAL DIVISION

This division has been thoroughly reorganized by its new editor, Mr. Boutwell. School Life, which has become not only the organ of the Office of Education but also a teachers' guide to all publications of the Government which may be useful in schools, has attracted much favorable comment during the year. Mr. Boutwell is now planning some reorganization of the staff in light of the enlarged responsibilities growing out of the activity of the major survey staffs. Moreover, our publication service will increase as larger appropriations are made for printing. As a result, some additions to this staff may be necessary in the near future.

LIBRARY DIVISION

During the year just closed, the library, under the chiefship of Miss Sabra W. Vought, has rendered unusual service to the various divisions of the office itself and new services to the educational field. Miss Vought's report is on page 38. I call special attention, however, to the brief comment on articles in educational periodicals which Miss Vought prepares for each number of School Life; to the reorganization of the Record of Current Educational Publications appearing quarterly and promptly, and so prepared under the direction of members of the staff and outside experts as to fill a new place in American education. Miss Vought also acts as contact agent with the American Library Association. The additions to our library staff should be catalogers and service clerks chiefly. More than half of our fine collection of textbooks have not been cataloged because there is insufficient shelving in our library. Little progress can be made in further service of this division until better housing facilities are obtained.

During the year Miss Edith A. Lathrop was appointed associate specialist in school libraries. She has been making a study of the library in the elementary school and the relation of the county library to the rural school. Miss Martha R. McCabe is the chief bibliographer of the library. She edits the Record of Current Educational Publications, contributing the section on "Proceedings and reports"; compiles and edits bibliographies prepared in the office for publication, as well as special bibliographies which are made in answer to individual requests. During the past two years there have been issued by the library several bibliographies of research studies in education covering masters' and doctors' theses as well as studies made by educational associations and departments. This work is an important responsibility of Miss Edith A. Wright, who also assists with the reference work of the library.

SERVICE DIVISION

For the work accomplished by the Service Division during the past year, you are referred to the report of Mr. L. R. Alderman, the chief (page 24). As now organized this division accepts major responsibility for service contacts with the school systems. The specialists in this division meet with State and local school officials to offer advice and help in the following fields: Adult education,

commercial education, elementary school projects, home economics, home education, education by radio, recreation and physical education, and school building problems. The chief of this division is called upon to direct State and district surveys which are requested by school officials. During this period of depression it may be expected that this function will become increasingly important inasmuch as school boards and their executive officers are anxious to ascertain how they may secure increased educational service without increasing expenditure, or, where educational expenditure must be reduced, how reductions can be made with the minimum curtailment of educational service.

In addition to his duties as chief of the service division, Mr. Alderman, as principal specialist in adult education, is contact officer with institutions, State departments of education, and local school officers in regard to evening and continuation schools and extension education.

Mr. J. O. Malott, senior specialist in commercial education, makes contact with groups of business men, and by conferences, addresses, and reports, brings to commercial teachers advice on modern business practices.

Miss Florence C. Fox, associate specialist in elementary education, is frequently assigned to assist in making cooperative studies. During the past year for instance, Miss Fox has cooperated with the Oregon Trail Memorial Association, with the National Safety Council, and with the George Washington Bicentennial Commission in preparing materials for use in schools.

Miss Emeline S. Whitcomb, senior specialist in home economics, serves educational institutions and individuals who are interested in home-economics education. She has cooperated with educational institutions in holding regional conferences on the problems of the home in a changing industrial order.

Miss Ellen C. Lombard, associate specialist in home education, is charged with the investigation and study of methods, materials, and practices of organizations which try to coordinate the work of home and school. Her service makes her chief contact officer with such organizations as the National Congress of Parents and Teachers.

During the past 15 months the Office of Education has had the services of a specialist in education by radio who was loaned by the Payne Fund, of New York City. All arrangements have been made for the selection of a senior specialist in education by radio, a position which will be filled probably before this report is in print. This specialist will advise educational institutions and individuals who are interested in education by radio, and make contact with broadcasters as well as educators.

Dr. Marie M. Ready, associate specialist in recreational activities, keeps in contact with the status of physical education, recreation, school playgrounds, and summer camps in the United States and foreign countries; and cooperates with such associations as the National Recreation Association, the Camp Directors' Association, and the American Physical Education Association.

Miss Alice Barrows is charged with the responsibility of handling the problems arising in the school-building field. As secretary of the recently organized National Advisory Council on School Building Problems, which cooperates with this office, her field contacts are

chiefly with school architects and with school administrators who may be engaged in building schools. She also makes some school-building surveys for local boards of education, and carries on research studies on school-building problems.

RESEARCH AND INVESTIGATION

This is the heart of the Office of Education. Here the major part of its recurring work of gathering facts, digesting them, and preparing and publishing bulletins takes place. The division is under the immediate and personal direction of the Assistant Commissioner of Education who is aided by individuals possessing both a broad outlook and highly specialized training. At the present time these consultants are: Dr. James F. Rogers, who has familiarity with the field of the natural sciences and specialized preparation in health education, and Mr. M. M. Proffitt, who is well prepared in the fields of psychology and guidance and highly specialized in the vocational aspects of education. A third assistant to the assistant commissioner was authorized by the Seventy-first Congress and is to be an individual well trained in psychology and the theory of education, and specialized in the field of tests and measurements. The members of this division are frequently called by the chief of the Service Division to aid in making State and local school surveys. As at present organized, the work of this division is handled largely through five minor divisions (see Chart). They are:

1. American school systems

Mr. W. S. Deffenbaugh, chief of the division, is responsible for studies in the administration of American school systems, local and State. At the present time he also gives attention to developing the field of school supervision.

Mr. Timon Covert is specialist in the field of school finance. During the period of the nation-wide survey of finance, Mr. Covert will be associated with its staff.

Dr. W. W. Keesecker specializes in the problems of school law and school legislation. It falls to his lot to advise and assist the specialists in so far as their problems bring them in contact with legislation.

The study of such problems of the schools as pupil personnel, curriculum, extracurriculum activities, etc., are handled in four sections as follows:

(*a*) Early elementary (including nursery schools, kindergartens, and the primary grades) studied and interpreted by Dr. Mary Dabney Davis and Miss Rowna Hansen.

(*b*) Later elementary (in general, grades 3 to 6 in the usual city school system) and post elementary (grades 7 and 8 in rural and village schools). The specialist is Miss Mina Langvick.

(*c*) Early secondary. This unit will ultimately embrace the work of grades 7 to 10, inclusive, as these will exist in a completely reorganized school system. During the period of school reorganization the specialist in charge of this section will give major attention to junior high schools and considerable attention to senior high-school units in cities. After the conclusion of the national survey of secondary education it is expected that Mr. Jessen will devote full time to this section.

(*d*) Later secondary. This section is concerned with the work of grades 11, 12, 13, and 14 in the completely reorganized school systems and with all junior colleges. During the progress of reorganization this specialist will also be concerned with 4-year senior high schools in village and rural areas. During the progress of the national survey of secondary education major studies in the work of the smaller high schools have been undertaken by Mr. Walter H. Gaumnitz. After the survey has been completed either Mr. Gaumnitz or some other competent specialist should maintain the work of this section.

Future additions to this division should include a specialist in school supervision.

2. Division of special problems

This division is concerned with the problems growing out of the education of children who do not fit well into the normal class organization of the usual American school, with types of children who have not heretofore received adequate consideration, and with types whose special needs and abilities have not been sufficiently studied. The sections as at present organized or in process of reorganization are:

(*a*) A section in Negro education. The Negro has made America's great contribution to music. The phenomenal success of the play, "The Green Pastures," indicates that there is real dramatic talent in members of this race. It is believed that psychological studies of Negro children will be profitable in ascertaining their capacities and capitalizing these for the benefit of the Republic. In many States of the Union dual school systems are maintained. In such States our specialist in Negro education will assist in working out the problems resulting from this dual administration. The specialist in charge is Dr. Ambrose Caliver, who is at present assisted by one professional and one clerical worker.

(*b*) A second section is devoted to the education of exceptional children. For the past year one specialist has been at work on these problems, Dr. Elise Martens, who is especially prepared to handle the problems arising in the education of children mentally subnormal and mentally supernormal. Ultimately this field should have Miss Martens's entire time. The last Congress authorized the appointment of a specialist in the education of the physically handicapped. This is another large field involving work with the blind and near-blind, the deaf and hard of hearing, the anemic and undernourished, the tubercular and those predisposed to tuberculosis, the cripples, and some with speech defects. It may be that a third specialist to deal with the social delinquent will be needed in this section.

(*c*) A section having to do with the education of indigenous peoples. Through a subsidy from the Carnegie Corporation and administered by Stanford University, Mr. H. D. Anderson has spent one year in Alaska studying sociological and psychological problems of the Eskimo. He is now at work in Alaska on similar problems concerned with the Aleuts. We should ask Congress to authorize the appointment of a full-time specialist in this field to continue work of this sort with continental Indians, the Porto Ricans, the Hawaiians, the Filipinos, and the native populations of our other possessions.

(*d*) A section on problems of education in sparsely settled areas. The possible consolidation of school districts, the transportation of pupils, problems of housing and similar issues result from sparseness of population. At the present time these problems are studied by Miss Annie Reynolds and Mr. Walter Gaumnitz.

Matters of administration and supervision concerned with groups of children of these types fall to the chief of the division, Mrs. Katherine M. Cook, who is thoroughly familiar with the problems arising in the country schools and who has, during the past year, familiarized herself by study and personal visits with the situation in Alaska and the movements under way in Mexico for the better education of indigenous peoples. She has also kept in very close touch with the movements designed to improve the educational opportunities of our Negro people.

3. Division of foreign school systems

Keeping Americans informed on movements in European school systems was an important feature of the work of this office during the administration of Commissioner Harris. Due to shortage of funds this work yielded to the pressure of other types of service after Doctor Harris's retirement. The Great War in Europe, the overturning of monarchical institutions, and the general reconstruction of European society are bringing many countries face to face with some of the problems of democracy with which our own educators have been struggling. It would seem that American educators should be informed on what is going on. Moreover, there is an educational awakening all over the world. I reported last year that increasing importance of this work justified a division to be concerned with it. We propose to add to the three persons who have been giving their attention to translation and evaluation of credentials and endeavoring to cover parts of this research work, three more specialists: First, one in comparative education—Western European, with emphasis upon the Germanic and Scandinavian countries. Doctor Abel, the chief of the division will himself be responsible for movements in France and Belgium, and Mr. Turosienski for movements in the Slavic countries. The new specialist, whose employment was authorized by the Seventy-first Congress, should keep track of the movements in the Germanic and Scandinavian countries. Second, a specialist in comparative education—Oriental. The remarkable progress made by Japan and the educational awakening in China appear to demand the addition of some one who is versed in the languages and school systems of these countries. It is proposed to ask the next Congress for authority to employ a specialist in this field. Third, a specialist in comparative education—Latin American. This specialist should be well versed in Spanish and have a working knowledge of Portuguese in order that he may follow the educational advances of our American neighbors. Incidentally he will watch educational movements in Spain and Portugal.

4. Division of collegiate and professional education

Dr. Frederick J. Kelly has but recently assumed the chiefship of this division and must be allowed some time to work out the details of organization. His dominant interest is in the critical and experi-

mental study of problems of college and university instruction and organization. It is expected that the investigative point of view will play an increasingly important part in all the work of the division.

At the present time Mr. Frazier gives his attention to the professional education of teachers, and for the next two years will be closely identified with the national survey of this field. Doctor Greenleaf maintains a close relationship with the land-grant colleges and is responsible for land-grant college statistics. He has also given some attention to the guidance field and is issuing a series of short pamphlets entitled "Careers," selecting for study those which require a college education. Doctor John has been attempting to cover the entire field of graduate education and education for the professions other than teaching. This is too big a field for one man. Rather heavy burdens also have been thrown upon this division recently by its responsibility for the Interior Department's supervision of and cooperation in the development of Howard University. It would appear, then, that more specialists will be needed in this division within the next two or three years.

5. Statistical division

This division is in a sense the handmaid of all the other divisions. It serves not only to gather the figures on enrollments, costs, etc.—data essential to the work of all the other specialists—but it also operates as a pool for the personnel and equipment necessary for statistical work of other specialists. In the near future attention must be given to strengthening this division, especially in these respects: First, the work now done by four assistant statisticians who are charged with gathering data in the field every other year should be reorganized in such a way that six persons may gather this information in a 4½-month period, thereby shortening the time which elapses between the close of a given school year and the issuance of findings. The two additional helpers have not been requested as yet because we have been unable so far to work out a plan for full utilization of the time of six men when they are in the office. As the Office of Education learns more about the services which the profession wishes it to perform, doubtless every minute of such time can be used to advantage. Second, there should be a section in the statistical division having personnel and machines adequate to the making of graphs and tables needed for all our publications and survey reports. At the present time there is one artist and one clerk part time rendering this service. One more draftsman and one more operator of wide-carriage typewriters could be used to advantage. Third, one specialist, trained as a certified public accountant, is needed to assist State departments of education and some institutions to reform their records and reports.

MAJOR SURVEYS

As explained in our last annual report, this division has been created in response to demands for more data on educational problems than this office has been able to gather in the past. Many believe that the proper reply to this demand is the creation of a national

executive department of education with ample funds for research. It has been proposed in the Congress that $1,000,000 annually be expended for such research. Our program for this new division calls for:

1. An approximate annual expenditure of $200,000 to $250,000.
2. Intensive study of about three major educational problems simultaneously.
3. The use of temporary staffs of experts, who will not remain in the Government service past the period for which the survey runs.

To illustrate the first point, I repeat and complete a form to be found in our 1930 report:

Survey of—	1930	1931	1932	1933	1934	1935	1936
Secondary education	$50,000	$100,000	$75,000				
Teacher education		50,000	80,000	$70,000			
School finance			50,000	100,000	$100,000	$100,000	
Special education				50,000	100,000	100,000	
X					(?)	(?)	(?)
Y						(?)	(?)
Total	50,000	150,000	205,000	220,000	(?)	(?)	(?)

No survey of special education (a study of those children who show marked deviation, physical, mental, and moral, from the normal) has been authorized, but in response to many demands from interested associations, careful estimates of its cost have been prepared. It is entered here merely to show that we believe the amount of money stated above is ample for the present and that a million dollars can not be expended wisely by the United States Government for educational research. Without drawing heavily from the university research centers, it is our policy to strengthen, not weaken, institutional research in education.

The table indicates that three studies are in progress simultaneously. In selecting topics these principles should prevail: (*a*) The studies so far as possible should supplement and complement one another, i. e., the secondary survey omits consideration of the high-school teacher which is covered in the teacher education study. Both the first two studies omit consideration of financing the institutions required, for this item is covered in the third survey. (*b*) The studies should not overburden the school executives in the field who are called on for data. For instance, if one study involves check lists for high-school principals, the next study should involve this group as little as possible. (*c*) The studies should be requested by representative groups of professional educators including usually the National Council of State Superintendents and Commissioners of Education. (*d*) The studies should be of such character that they are beyond the scope of any State office and too extensive for the usual university school of education—i. e., it should be clear that the Federal Government is the logical agency to carry on the study.

The reasons for the use of temporary staffs perhaps call for brief comment. Although some of the reasons below are matters of policy which may not prevail under other national administrations, all our guiding principles are included. They are:

(*a*) That the Office of Education staff may be kept small enough to prevent the development of a bureaucratic spirit. The chief function of the Office of Education is to keep the public, both professional and lay, informed on the progress of American education. We need a staff large enough to gather the data, tabulate, edit, and publish them; to make studies indicating trends; and to utilize what we gather in answering inquiries from the field and to assist local schools and institutions in improving their work. Such a staff this next year costs $280,000 in salaries, $25,000 for general operation, and $62,000 for printing, or in the neighborhood of $360,000; and so far as I can see additions to the staff which I have already noted ought not to increase that annual budget by more than $50,000 to $100,000 within the next 10 years.

(*b*) That the major work may be done by recently trained research workers—preferably those who have just secured their Ph. D. degrees. I have said we do not wish to weaken but to build institutional bureaus of research. This use of younger men and women enables the Commissioner of Education to take from the graduate schools the ablest and most promising persons and give them a 3-year post-doctorate period of preparation for their life work. It should also provide them a national rather than a local or provincial view of the problem involved. These folk are paid about what they would secure as assistant professors in standard universities.

(*c*) A staff of part-time established experts in various aspects of the field. These men are without exception employed at salaries and under conditions of work which would not induce them to qualify under civil-service regulations and accept salaries in the Government classifications. They may be had, however, for temporary periods (quarters off) and for part-time service at less than their regular salary scale due to their eagerness to serve their Government, the chance afforded to get an up-to-date national outlook on their field, etc. These men actually direct the younger workers and assist them in organizing their materials.

This program of combining young full-time workers and part-time experts gives us higher-grade service than we could secure in the regular staff through civil service, furnishes American education something heretofore lacking—namely, a 3-year post-doctorate period of training for its most promising research recruits, and successfully defeats any attempt to build a Federal bureaucracy in education.

Since the plan is to make these studies purely objective and to avoid positive recommendations on the part of the experts, it is hoped that at the conclusion of each survey a series of regional conferences will be held in different parts of the country, each conference to be held in cooperation with some well-established institution interested in the aspect of education with which the survey is concerned, and at the invitation of the superintendent or commissioner of the State in which it is held.

COOPERATION AND COORDINATION

I noted last year several efforts to coordinate work of existing associations and to prevent duplication and waste of effort. I can report a most encouraging reception of this program and much progress in its realization.

The national committee on State histories of education, of which Prof. Stuart Noble is chairman, is collaborating with the Office of Education in the preparation of a new series of State histories of education. At the present time work on manuscripts for the following States is reported under way: California, Connecticut, Georgia, Kansas, Kentucky, Maine, Maryland, Massachusetts, Nebraska, New Jersey, Oklahoma, Oregon, Utah, and Washington.

The committee on cooperation in research studies, of which Prof. W. S. Monroe is chairman, has continued its assistance. We have published the Bibliography of Research Studies in Education for 1928–29 as Bulletin 1930, No. 23, and the Bibliography for 1929–30, which will be issued as Bulletin 1931, No. 13, is in press at this writing.

As an outcome of the conference on cooperative research held at Atlantic City, N. J., in February, 1930, a list of research studies in education undertaken by city school systems was issued in mimeographed form as Circular No. 18. This included studies recently completed, those in progress, and studies contemplated for the school year 1930–31. A similar list of studies undertaken by State departments of education and State education associations was issued as Circular No. 31. There was prepared for the Educational Directory a list of directors of educational research in State departments of education, State education associations, city school systems, universities, colleges, normal schools, and independent organizations. There was also issued as Leaflet No. 2 a pamphlet on the Organization and Functions of Research Bureaus in City School Systems.

A new editorial committee consisting of some of America's leading specialists in education now selects the most important articles published in their respective fields for the Office of Education's Record of Current Educational Publications.

For 18 years the "Record" of the most important articles in 79 different phases of education has been prepared in entirety every three months by the library division of the Office of Education. Now the 79 phases of education covered have been divided into 14 major groups. An outstanding specialist in each of the 14 fields was invited to submit quarterly a list of the notable articles in his particular field appearing in educational magazines, important books, reports, proceedings, and other publications. Their first selection covering the period from July to December came from the press in March as Bulletin 1931, No. 3.

The educators who are assisting the Office of Education to make the Record of Current Educational Publications a highly selected list of best thought in the educational press, and the sections on which they report are: Dr. Arthur J. Klein, professor of school administration, Ohio State University (collegiate and professional education); Dr. W. C. Eells, associate professor of education, Stanford University (junior college); Dr. L. V. Koos, professor of secondary education, University of Chicago (secondary education); Dr. Ernest Horn, professor of elementary education, State University of Iowa (elementary education); Miss Edna Dean Baker, president, National College of Education, Evanston, Ill. (nursery-kindergarten-primary education); Dr. Carter Alexander, professor of education, Teachers College, Columbia University (public-school administra-

tion); Dean M. E. Haggerty, School of Education, University of Minnesota (educational psychology); Dr. E. S. Evenden, Teachers College, Columbia University (teacher-education); Edwin Lee, director division of vocational education, University of California at Berkeley (vocational education); and Alonzo G. Grace, assistant director division of extension teaching, University of Rochester (adult education). The following specialists from the Office of Education complete the list of contributors: Dr. Elise Martens (education of exceptional children); Dr. James F. Abel (foreign education); Dr. Ambrose Caliver (education of Negroes); and Miss Martha R. McCabe, assistant librarian (proceedings, summaries, courses, etc.).

The national advisory council on school-building problems held enthusiastic sessions in Detroit in February. All its members have cooperated wonderfully well. The work of the past year has been centered on the elementary school. This study will be continued during 1932. Next will follow a study of the problems involved in junior high-school buildings, and 1934 and 1935 will be given to consideration of buildings for senior high schools and 4-year high schools. For details you are referred to the special reports of this council written by Miss Alice Barrows, who serves as its executive secretary.

I am glad to report that we have been able to assist State departments of education in many ways and to make special note of the following: Members of our statistical division helped South Carolina revise its office records and reports; members of the special problems division assisted the State departments of Arkansas and adjoining States in a conference on rural-school problems and performed a similar service for a group of States which sent representatives to a similar conference at Kalamazoo, Mich., under leadership of the Michigan State Teachers College, and also in launching a study of such problems in Vermont.

Our office has interested itself in guidance and through Mr. Proffitt as a member of the National Vocational Guidance Association committee is fostering this work in many States. We have had valued cooperation from the National Safety Council in the preparation by Miss Fox of a guide to course of study making in safety to promote interest in this field. Miss Fox also has contributed to the work of the George Washington Bicentennial Commission and the Oregon Trail Association.

We have continued our efforts to secure new interest in proper education for home making. Two conferences were held within the year, one in cooperation with the State College of Iowa at Ames in November, and one in cooperation with the University of Idaho and the State College of Washington at Spokane during the Inland Empire Association meeting in April. In both conferences Miss Whitcomb and the commissioner participated.

Parent education was the general theme of this year's meeting of the National Congress of Parents and Teachers, and a two days' conference preceded the general session. This office participated actively through assistant commissioner, Miss Bess Goodykoontz, Miss Lombard, Mr. Alderman, and Miss Martens.

Mr. Deffenbaugh is actively assisting State Superintendent Rule in a thoroughgoing State study of education in Pennsylvania, and Doctor John has been assisting a commission of the State of Virginia in its efforts to set up a State college for women.

In addition, much time of staff members has been given to collecting data for the White House Conference on Child Health and Protection. Assistance has also been rendered the President's Emergency Committee for Employment.[1]

Our service division, through Mr. Alderman, has been in conference with the Department of Justice regarding adult education in Federal prisons and has held, in cooperation with the Ohio State Department of Education, a conference at Chillicothe, Ohio, on this subject. In collecting data prisons in many States have been visited. The matter also received consideration of the National Council of State Superintendents and Commissioners of Education in December, 1930.

Regional conferences have been held in two new fields during the year, in both of which your commissioner participated actively—one in higher education at Eugene, Oreg., in April (called in cooperation with the University of Oregon), and one in secondary education at Greeley, Colo., in June (in cooperation with the Colorado State Teachers College).

FOUNDATION ASSISTANCE

Continued interest in our work on the part of foundations and philanthropists is also noted. The Carnegie Corporation has continued its grant to Stanford University which makes possible the continuation of Mr. H. D. Anderson's work in the study of the natives of Alaska. We expect to report fully on this experiment next year. This foundation has also made a grant-in-aide to the American Library Association which makes it possible for Miss Lathrop of our library staff to study the relationships between libraries and schools. This work will be undertaken in the autumn of 1931.

The grant of the Payne Fund, noted last year, made possible keeping our radio files up to date during the year. We acknowledge especial indebtedness to Mr. Armstrong Perry who devoted half time to the work and rendered us splendid service.

HOWARD UNIVERSITY

Howard University was officially inspected for the school year ended June 30, 1931, by a committee of specialists of the Office of Education appointed for this duty by the Commissioner of Education. Doctor John served as chairman and coordinator.

Lack of space does not permit the inclusion in these pages of a full exhibit of the affairs of the university. Consequently the full report of the activities of Howard University is to be published as a separate document.

In the fall of 1930 the Office of Education with the cooperation of the president, deans, and other officers of Howard University, com-

[1] Now known as the President's Organization on Unemployment Relief.

pleted a program of development for the university covering a period of 10 to 20 years. This program has for its purpose the setting up of a cooperative plan of financial support of Howard University by the Federal Government and other agencies.

Under the development plan, the Federal Government, in addition to giving a definite amount for the annual maintenance expenses of the school, will appropriate funds for a major building program covering a period of 10 years. Already considerable progress has been made in the designing and erection of a modern university plant. These buildings have been greatly needed, and when the present program of building is completed the university will have a high-grade plant harmoniously designed as a single project which will adequately meet the needs of the institution.

The program of development was accepted by the trustees of the university, the Commissioner of Education, and the Secretary of the Interior, and Congress made the appropriation to Howard University for 1931–32 in accordance with the first step set forth in the program.

The grand total enrollment of students for the year 1930–31 was 2,737, with a net total of 2,437. This represents a slight decline in numbers over the year 1929–30, the grand total for that year being 2,872 and the net total 2,619.

The total number graduating for the year 1930–31 was 321, or five less than the number graduating in 1929–30. The number of graduates in the several schools are as follows: Liberal arts, 83; education, 118; applied science, 6; music, 6; medicine, 54; dentistry, 12; pharmacy, 13; law, 12; religion, 9; and graduate work, 8.

The university received a total income of $2,147,174, of which $1,079,700 was for lands and buildings. Of the total income, $1,249,000 was received from the Federal Government and $898,174 from all private and institutional sources.

On May 4, 1931, the section of legal education and admissions to the bar of the American Bar Association placed the school of law on its approved list, effective as to all students matriculating after April 14, 1931.

Part II of this report, covering the administrative division, represents the responsibilities of the chief clerk, Mr. Kalbach; Part III, covering the work of the divisions other than administrative, is reported by the assistant commissioner, Miss Goodykoontz.

Part II.—ADMINISTRATIVE DIVISION

L. A. KALBACH, Chief Clerk

On March 16, 1931, in accordance with action taken by Congress, the administration of matters relating to the education and medical relief of the natives of Alaska, which had been under this office since 1885, was transferred to the Commissioner of Indian Affairs. This transfer caused the assignment of two of the principal employees of this division to the Indian Service, leaving the Office of Education without an assistant chief clerk.

Housing.—The lack of adequate space properly to house the enlarging staff of the office and the staffs of new surveys continues to be the most serious hindrance to efficient work on the part of the staff. Also, in order to provide space for employees of other offices of the department, it has been necessary to pack a considerable portion of the library books in boxes and store them in the basement, where they are inaccessible. Another considerable portion of the books has been placed on stacks on the ground floor of the building, while the main library and most of the library staff are on the sixth floor. This separation causes considerable waste of time and effort on the part of the library staff as well as inconvenience to the research workers. At the earliest practicable date additional space should be assigned to this office, and there should be a reassignment of the space so that the staff may be brought closer together.

Personnel.—The total personnel was 212 on June 30, 1931, of which number 155 were employed in the District of Columbia. Of the total number, 97 belong to the permanent staff while the remainder were employed on the surveys of secondary education and the education of teachers. The position of specialist in higher education was vacant for 11 months of the year, but it was finally reallocated to a higher grade thus making it possible to secure a well-qualified person for the position. In all, 19 of the permanent positions were reallocated during the year by the Personnel Classification Board to higher grades, either on appeal by the employees concerned or on a change of duties, which reallocations caused increases in salaries amounting to $6,860 per annum. Also, owing to vacancies and to filling several positions at lower salaries, it was possible to give small increases in salaries to 42 employees amounting to $4,090 per annum. Notwithstanding the small increases that it was possible to give to these employees, the salary status is still unsatisfactory. Of 101 regular employees provided for the fiscal year 1932, 73 are at salaries below the average salary of their grades, and of this latter number 47 are at the minimum salaries of their grades; 14 employees receive the average salary of their grades, and 14 receive more than the average salary; only two members of the staff receive the maximum salary of their grades.

For some years the office has been handicapped by a lack of sufficient clerical staff to assist the research workers and administrative officers. This makes it necessary for the higher-salaried members of the staff to give much time to work that could be done by lower-salaried clerks and stenographers. Five additional clerical positions are requested for the year 1933 to relieve this situation.

Miscellaneous.—A very considerable part of the chief clerk's time was given to the critical examination of manuscripts submitted for printing by specialists in the office as well as by persons outside the office engaged in educational research.

Part III.—ACTIVITIES OF THE OFFICE DURING 1930–31

BESS GOODYKOONTZ, Assistant Commissioner

The activities of members of the staff of the Office of Education are implied in three of the major functions of the office as outlined in the commissioner's annual report for the year 1929–30. These major functions may be stated as follows:

1. Fundamental research in education; the investigation of particular projects requested by organized professional groups; the collection of school statistics; and the diffusion of information on specific phases of education.

2. The location of researches now under way in education; cooperation with local governments, universities, and volunteer agencies which are making such studies; and, in so far as possible, the coordination of the efforts of all such groups.

3. The rendering of certain service functions for the reasons that (*a*) they furnish the best means of disseminating information, (*b*) they provide the only means of keeping members of our staff in direct contact with actual school problems, and (*c*) situations arise in local and State governments where an agent of the Federal Government is desired to serve as a referee.

The activities of the staff of the Office of Education for the year 1930–31 are reported in accordance with the above classification of functions.

1. RESEARCH, INVESTIGATION, DIFFUSION OF INFORMATION

Under this heading may be listed the collection, compilation, and distribution of statistics on education, which was a major reason for the establishment of this office by Congress; the description and analytical study of current educational practices; the collection and evaluation of material which is basic to school curricula; certain survey studies, which have the development of a technique as their primary purpose and service to specific communities as their secondary purpose. Examples of the above are found in the detailed lists of studies completed and in progress which follow. Due to the lack of laboratory facilities and the expense of field work, it is probable that experimental studies of educational materials and techniques will be relatively few. However, some are reported, as the experimental use of the height-weight record, and the discovery of children's out-of-school activities as a factor in curriculum development.

Approximately 80 manuscripts which were submitted for publication by the Office of Education were handled by the staff during the past year. Some of these were forwarded for review by individuals outside the office. These dealt with a variety of phases and specific examples of educational work. They included such topics as the county superintendency, the municipal university, the constitutional basis of public-school education, education in the Virgin Islands, and the education of Mexican children in American schools. These manuscripts were critically reviewed as to their suitableness for publication by this office. Some of these dealing with educational problems of national interest or local or sectional problems that have an implication for many other sections of the country have been accepted for publication.

Besides that phase of the work of collecting and disseminating information on education as represented in the printed publications of the office, there are issued from time to time circulars of information, mimeographed summaries, and bibliographies or reviews of new materials on important phases of education resulting from some-

what less extensive investigations than those usually reported in printed documents. Examples of this phase of the division's work are the following: Bibliography on Nursery Education, Circular No. 32; Electrical Engineering as a Career, Circular No. 25; State Supreme Court Decisions Relating to Excusing Pupils to Receive Religious Instruction, Summary; What the States are Doing for Exceptional Children, Circular No. 29.

The following studies have been reported by the several divisions for the past year:

HYGIENE AND HEALTH EDUCATION

JAMES FREDERICK ROGERS, M. D., Consultant

In addition to the consultative service rendered to specialists in the other divisions in the pursuance of studies involving child-health problems and to individuals and organizations in the field who ask for advice or information, the specialist in this field conducts studies in the field of hygiene of the school child, health education, remedial measures for physically handicapped children, covering a wide range of subjects.

Studies completed.—(1) Speech defects in school children. The nature, causes, and frequency of speech defects were studied, together with what is now done for the speech-defective school child by local schools and by State departments of education. First-hand observation of the training of speech defectives was also made. The results of the study appeared in Bulletin, 1931, No. 7, "The Speech-Defective School Child: What Our Schools are Doing for Him."

(2) Speech defects and their correction. This study is a sequel to the above, being a detailed investigation as to the nature, origin, detection, and treatment of speech defects. The material on the subject was prepared specifically to fill the unsupplied need of teachers without special training in the correction of speech defects, parents, and the speech-defective child himself.

(3) Biennial survey of health education. The results of the more notable studies bearing on the health of the school child which were completed during the past two years were summarized.

(4) An individual height-weight chart. A chart was devised on which a graphic record may be kept, throughout his school career, of the growth of the invidual child as represented by triennial measurements of height and weight. In addition to being of service to school officials, it is hoped that the experimental use of this card in a few cooperating centers will yield fundamental data on the much-discussed problem of height-weight standards.

(5) A chapter on Conservation of the Child was prepared for the publication on Conservation in the Department of the Interior to be issued by the department.

(6) Revisions were made of our publications on Child Health Programs for Parent-Teacher Associations and on Athletic Badge Tests for Boys and Girls.

Studies in progress.—(1) The physique and carriage of the school child. Investigations concerning the effect or noneffect of school conditions, passive and active, on the physical development and on the habitual postures of the child, and a study of the essential factors in body carriage.

(2) Mind-body relations. A study of the relation of physical development as usually measured, physical defects and diseases, and of physical activities to mental ability as measured by school marks, school progress, and by intelligence and other mental tests.

(3) A self-survey for schools. Forms are being prepared which should be helpful to school authorities in studying the conditions in their schools affecting the health and safety of the children. This will cover fire protection, ventilation, lighting, washing facilities, health examinations, health education, etc.

GUIDANCE AND INDUSTRIAL EDUCATION

MARIS M. PROFFITT, Consultant

To the specialist in guidance and industrial education is assigned the responsibility of conducting studies and investigations and of giving informational and advisory services in all phases of industrial education and of guidance to schools, organizations, and individuals interested in the promotion and development of guidance programs.

Studies completed.—(1) Industrial education in Buffalo. This manuscript on the industrial education program of the Buffalo public schools was prepared from materials collected for the survey of the schools of that city and was published as a pamphlet of the Office of Education.

(2) Biennial survey of industrial education. This study included the collection and compilation of information on various phases of industrial education and vocational guidance throughout the United States.

(3) Study of school systems for comparative data. By means of field trips information was collected from three cities of comparable size. The items included industrial programs, special classes, enrollments by curricula, school census, methods of financing school costs, methods of keeping financial accounts, and the proportion of local revenue used for school purposes. A report of this material is available for use in the Office of Education.

(4) List of colleges offering courses in guidance. In order to meet the numerous requests coming to the Office of Education for information as to colleges offering courses in the general field of guidance, a list of 30 colleges and universities offering courses in educational and vocational guidance was compiled by geographic regions and issued in mimeographed form.

(5) Bibliography on guidance. In cooperation with the library division a highly selected, annotated bibliography of approximately 75 references was compiled on educational and vocational guidance for issuance in printed form.

Studies in progress.—(1) Information on the guidance work carried on in a large number of public-school systems is in process of collection, to be compiled as a report showing present practice.

(2) Bibliography of books and materials suitable for use in occupational information courses and for general reading in industrial schools and classes.

(3) Case studies of intermediate-grade pupils. This is a part of a larger study of intermediate-grade pupils. An outline is in prepa-

ration for the collection of information relative to school success and physical, mental, and social characteristics.

(4) A self-survey for schools of their guidance programs. This is one of the series of survey-forms which it is hoped will be of service to school officials in studying their own school systems.

DIVISION OF AMERICAN SCHOOL SYSTEMS

W. S. DEFFENBAUGH, Chief

The general function of the division of American school systems is to collect and compile information and prepare publications regarding elementary and secondary education in the United States. Studies are made of State and local school administration and supervision; school finance; school legislation; nursery schools; kindergarten-elementary and secondary-school organization, curricula, methods of instruction; and other phases of American elementary and secondary education.

Studies completed.—Within the year three chapters for the Commissioner's Biennial Survey were prepared by members of the division, and one on elementary education was prepared in collaboration with the assistant commissioner. The chapters are:

(1) Administration and Finance. This chapter shows in Section I trends in the administrative organization of State and local school systems; and in Section II the trends in methods of raising State and local revenue for the public schools and of distributing revenue from State sources.

(2) Educational Legislation, 1928–1930. This is a summary of outstanding legislation within the biennium on school support, the county unit, teacher training, and other important subjects receiving legislative action.

(3) Elementary Education. Treats of movements relating to organization, the curriculum, progress of pupils, supervision of instruction, instructional materials, and research and investigation.

(4) Secondary Education. This chapter deals with the extent of and trends in the reorganization of secondary schools; junior colleges; private secondary education; the curriculum; articulation; the projects of the national survey of secondary education.

The other studies completed during the year were:

(5) Kindergarten-Elementary Grade Report Cards. An analysis of 628 report cards was made to show correlation of subject matter, recognition of individual differences, behavior development, achievement tests, extra-curricular activities, cooperation of school and home.

(6) How Boys and Girls Can Help in the Drought Emergency. This pamphlet, for the use of children in the elementary schools, was prepared in cooperation with the American Red Cross at the request of the National Drought Relief Committee.

Studies in progress.—(1) Digest of 1931 educational legislation in each of the States in which such legislation was enacted at the 1931 session of the State legislatures.

(2) An analysis of legal and other regulatory provisions affecting secondary schools in each of the States is being made as a part of the secondary-school survey.

(3) A study to discover the interests and activities of children that are basic to the development of the elementary-school curriculum. Children of normal and superior intelligence living in contrasting types of environment are being interviewed and given specific tests to obtain data relative to their interests. These data will be analyzed with reference to difference in environmental factors, levels of intelligence, and any individual difference that may be evident.

(4) How to make a course of study in nature study and general science. This study includes (*a*) brief summaries of research studies that may contribute to the determination of objectives, principles of procedure, as criteria for the selection and organization of subject matter in general science; (*b*) sample units of content or of educational activities and related techniques of teaching; and (*c*) source material useful to curriculum committees and teachers.

(5) How teachers are selected. This study has two major purposes: (*a*) To determine the status of current practices in the selection and appointment of teachers; (*b*) to identify and study intensively those public schools where the procedures followed in selecting and appointing teachers are unusual and innovating. A summary of preliminary findings was published in the February issue of School Life, 1931.

(6) Out-of-school activities of pupils in grades 4, 5, and 6. This study is being made in cooperation with several of the city school research bureaus and will endeavor to show in what activities intermediate-grade pupils engage outside of school, such as games played, work done, books and papers read.

(7) Outline for self-survey. This is a section on school administration of an outline being prepared for the use of school superintendents who may want suggestions regarding school administration when surveying their respective school systems.

(8) School administrative units with special reference to the county unit. Classifies and briefly describes school districts in the United States. Contains information regarding powers and duties of county boards of education and local school trustees.

DIVISION OF COLLEGIATE AND PROFESSIONAL EDUCATION

FREDERICK J. KELLY, Chief

Two duties which are placed by statute upon the Office of Education are assigned to this division: (1) The administration of the funds accruing from the land grants under the Morrill Act of 1862; (2) on the basis of an inspection, the making of an annual report to the Secretary of the Interior and to Congress of the work of Howard University. In addition to these two legally defined functions, the work of the division conforms from year to year to the types of studies which hold most promise of serving the needs of universities, colleges, and professional schools, including normal schools and junior colleges.

Studies completed.—(1) Study of scholarships and fellowships available at institutions of higher learning in the United States. This is the most comprehensive study that has ever been undertaken by any agency on this subject and is of manifest interest to both educators and college students. The study is now being published.

(2) A supplement to the 1930 bulletin on "Accredited Higher Institutions" was issued in order that information on accredited higher institutions might be brought up to date.

(3) A report to the board of trustees of Howard University and to the Congress of the United States on "A Program of Development of Howard University from 1931–32 to 1940–41" was prepared and made available to those interested.

(4) Three chapters for the Biennial Survey of Education were prepared by this division, one on The Professional Education of Teachers, one on College and University Education, and one on National Surveys of the Office of Education.

(5) Career leaflets offering vocational and educational guidance material on the following subjects have been prepared, some of which are already in print: Law, medicine, dentistry, journalism, librarianship, architecture, civil engineering, electrical engineering, mechanical engineering, pharmacy, nursing, and forestry. These leaflets answer specific questions which high-school graduates and college students ask concerning vocations.

(6) Leaflet on Federal Laws and Rulings Affecting Land-Grant Colleges. This is a summary of material in great demand.

(7) The annual report of statistics of land-grant colleges and universities. This is a section of the Biennial Survey chapter on Statistics of Universities, Colleges, and Professional Schools.

(8) Report of the annual inspection of the work in the several divisions of Howard University. This is a full and detailed report of various phases of the institution's progress.

Studies in progress.—It is the intention of the office to make use of much valuable information collected through the national surveys but not reported in full by them. Two studies now in progress will report data secured in the survey of land-grant colleges and universities:

(1) Faculty inbreeding in land-grant universities and colleges.

(2) Salaries of staff members of land-grant universities.

Other studies in progress in this division follow:

(3) Career leaflets on the following subjects: Art, accountancy, advertising, Army and Navy, aeronautics, agriculture, banking, commerce, drama, chemical and general engineering, foreign service, geology, Government service, home economics, insurance, manufacturing, optometry, real estate, social work, teaching, theology, veterinary medicine, and music.

(4) Loan funds for college students. It is the purpose of this study to make known the various loan agencies and funds which are available to boys and girls for the purpose of borrowing money with which to go to college.

(5) Novel features of college and university summer sessions. Those unusual summer-session opportunities will be reported which may be of service to deans and directors interested in similar service.

DIVISION OF SPECIAL PROBLEMS

MRS. KATHERINE M. COOK, Chief

The division of special problems was organized in recognition of the fact that the effort of our schools to provide equality of educational opportunity "to all the children of all the people" neces-

sarily brings into being special problems in dealing with certain groups which have not readily fitted into our regular educational scheme of things, and which are of such urgent importance as to deserve special attention. A good beginning has been made during the year in recruiting a staff capable of investigating these special problems and in lending assistance to agencies working or interested in these special fields.

Studies completed.—(1) Supervision and Rural School Improvement. This study gives information on the present status of supervision in rural schools, the work of rural supervisors, and the results obtained from supervision.

(2) Biennial Survey of Education of Exceptional Children. This publication presents a general survey of the progress schools have made in the education of exceptional children, both mentally and physically. It includes information on State, city, and county provisions for exceptional children and on the training of teachers in the instruction of this class of pupils.

(3) Biennial Survey of the Education of Indigenous Peoples and Minority Groups. This study includes sections on the education of Negroes, the education of Alaskan natives, and on education in Hawaii, in the Philippine Islands, in Porto Rico, and in other Territories of the United States.

(4) Plans of four States for the development of rural school instruction. The States included in this study are Minnesota, Missouri, North Dakota, and Idaho. For each State a considerable amount of detailed information is given relative to the historical development of educational programs in the rural schools, present practice in regard to administration and instruction, and daily programs.

(5) Three bibliographies on specific subjects have been issued: Status and Professional Preparation of Teachers in Rural Schools, Supervision of Instruction in Rural Schools, and Education and Psychology of Exceptional Children.

Studies in progress.—Members of the division of special problems are cooperating with the national surveys in making the following studies: Characteristics of secondary education in high schools of various sizes; preparation of teachers for the education of exceptional children; secondary education among Negroes; teacher education among Negroes.

Other studies now in progress in the division include the following: Professional and salary status of teachers of rural schools; educational facilities available for the preparation of teachers of exceptional children; problems which parents of exceptional children have to meet; a survey of the background factors of Negro college students; the status of elementary education in selected counties which enjoy the benefits of Jeanes supervisors; a bibliography of publications appearing in 1928–1930 on Negro education.

DIVISION OF FOREIGN SCHOOL SYSTEMS

DR. J. F. ABEL, Chief

The general purpose of this division is to gather data about education in foreign countries and to make it available to the people in the United States. Its study of educational practices in other

countries, especially as these countries attack new problems which have very great significance for education in this country, results in various sorts of publications and in service to many educational agencies.

During the year four circulars were prepared to help college and university registrars evaluate foreign school credentials: A bibliography of material for evaluating foreign credentials; Secondary schools in Poland; Information about the certificates issued by the Scottish Education Department; and Education in France, including a chart showing the organization of instruction.

A comprehensive study of the national administration of education, primary and secondary education, higher education, and technical and agricultural education in Belgium has been made by the chief of the division following his field study of educational conditions in that country during the past year.

Three publications, the manuscripts of which were arranged in 1929–30, were brought from the press: National Ministries of Education; Secondary Education in Norway; and A Graphic Presentation of Statistics on Illiteracy by Age Groups.

DIVISION OF STATISTICS

E. M. FOSTER, Chief

The statistical division has responsibility for collecting and compiling for publication statistical data for both public and private education in the United States. Data which are collected periodically are included in the Biennial Survey of Education. Special statistical studies are published as separate bulletins only. On request the division criticises statistical forms and supplies information to individuals by mail or through personal conferences.

Studies completed.—(1) Statistics of Public, Society, and School Libraries, 1929. Data cover 10,937 libraries of 1,000 volumes or more. (2) Expenditures in Publicly Controlled Universities, Colleges, and Professional Schools, 1927–28. (3) Per Capita Costs in City Schools, 1929–30. This gives data per pupil in average daily attendance for a selected group of cities. (4) Statistics of the Negro Race, 1927–28. This study gathers together all the statistics of negro education from the various publications of the office. (5) Educational Directory, 1931, Parts I and II. This includes State, county, and city superintendents and heads of institutions for higher education.

Studies in progress.—(1) Statistical chapters of the Biennial Survey of Education, 1928–1930: State school systems; city school systems; universities, colleges, and professional schools; teachers colleges and normal schools; public high schools; private high schools. (2) Statistical chapters of the Biennial Survey of Education for 1930–1932: Schools for the deaf; schools for the blind; schools for feebleminded and backward children; schools for delinquents; nurse-training schools. (3) Statistics for teachers colleges and normal schools for 1930–31 are being collected to supply current data for the National Survey of the Training of Teachers. (4) Statistics are being collected from approximately 10,000 private elementary schools. This has not been done heretofore. (5) Expenditures are being tabulated for about 1,000 colleges, universities, and professional schools

for 1929–30. (6) A study is nearing completion on the age-grade progress distributions of about 128,000 pupils in 56 elementary schools in 35 States.

SERVICE DIVISION

L. R. ALDERMAN, Chief

In addition to their many responsibilities in various phases of service to educational organizations and institutions, the members of this division engage in research in their respective fields.

Studies completed

Adult education.—(1) A study entitled "Biennial Survey of Education in the United States, 1928–1930, Adult Education." The study has to do with evening-school attendance, the importance of evening schools for adults who need adjustment to new conditions of employment and for young people who are employed during the daytime. The study shows tendencies in adult education and attempts to show the importance of evening schools as a necessary part of the American public-school system.

Home education.—(1) A study of the progress of parent education during the years 1928 to 1930. The bulletin resulting from this study contains a brief discussion of the growth and significance of the parent education movement; how growth has depended upon financial support of a foundation; the organization of a National Council of Parent Education and the nature of its membership; the White House Conference on Child Health and Protection and its committees; parent education in colleges and universities, public schools and State departments of education. A survey of the progress of organizations in which parent education projects are conducted is also included.

Commercial education.—(1) A study of commercial education for the biennium 1928–1930. This presents an analysis of present trends and problems in commercial education, including enrollments, research in curriculum, and a statement of the chief problems now pertaining to business education.

Many minor investigations were engaged in for the preparation of material of service to people in this field. In certain cases these investigations resulted in bibliographies or circulars of material, such as material for libraries of commercial teacher-training institutions, junior colleges that offer courses in business subjects, state-wide surveys of commercial education, etc.

Elementary-school projects.—(1) A study of material for the preparation of a circular on Children's Preferences in Radio Programs.

(2) An exercise in pageant form for elementary teachers and pupils on Childhood Days in Washington's Time.

Home-economics education.—(1) In cooperation with the White House Conference on Child Health and Protection, studies concerning: (*a*) The contribution of home economics to the health of the school child; (*b*) home management and equipment; (*c*) education for home and family life at the elementary and secondary school levels.

(2) A chapter on homemaking education for the Biennial Survey of Education, 1928–1930. This study was concerned with the newer interpretations of home economics, child care and training courses, expansion of home economics in our public schools, present practices, family relationships and social adjustments, and home economics in parent education.

Physical education.—(1) Professional courses in physical education for teachers. This was a study of the professional courses in physical education for teachers, offered in practically all of the institutions of higher education in the United States.

(2) Requirements by State departments of education for teachers and supervisors of physical education in the grade and high schools. Recently there has been considerable interest regarding not only the qualifications of teachers of physical education but also of teachers of health education. This study summarizes the progress made in strengthening the requirements for teachers of physical education.

(3) A special chapter, Health and the Rural School, which was a review of recent research and present conditions regarding the need and value of a program of health (including recreation) for rural schools, was printed in Special Problems in Education of Rural Children, a bulletin published by the department of rural education of the National Education Association.

(4) A report regarding recreation and physical education was prepared for the Biennial Survey of Education, 1928–1930.

Radio education.—(1) A study of education by radio during the biennium 1928–1930. This was entitled "Radio and Education" and was published as a chapter of the Biennial Survey of Education.

School building problems.—(See Report on National Advisory Council on School Building Problems in Section II, Coordination of Research Activities.)

Studies in progress

Adult education.—(1) A study of how inmates of Federal and State prisons may best be trained for specific jobs.

(2) A study to determine the most effective State and district organizations for promoting functional literacy.

(3) A study of what State and community programs are the most effective in interesting boys and girls who, for any reason, have discontinued attendance at the day schools.

Home education.—(1) Continued appraisal of the various aspects of the parent-education movement and of the progress of the parent-teacher movement.

(2) A study of literature on social and economic changes affecting home and family, in preparation of a reading course; a study of books of fiction which interpret child life, in preparation of reading course.

(3) A study of data on the place of the elementary school principal in the parent-teacher movement, for use in a section for the Eleventh Yearbook of the Department of Elementary School Principals, National Education Association.

(4) A circular showing the courses offered on parent education in summer schools of colleges and universities.

Commercial education.—(1) A study of commercial-teacher-training curricula in the different types of institutions. This study pertains to entrance and graduation requirements, the organization and length of the curricula, provisions for obtaining supervised business experience, the extent of the offerings in the principles and supervision of commercial education, subject matter and methods courses, directed teaching, and other pertinent factors.

(2) A study of business education in the junior colleges listed in Office of Education Bulletin 1931, No. 1. This study pertains to the objectives, organization, present practices and extent of offerings in business subjects in the junior colleges.

(3) A study of the standards of achievement in shorthand and typewriting. The purpose of this study is to gather data regarding various practices in the grading of test papers, sources from which test material is obtained, length of tests, nature and difficulty of test material, and speed and accuracy requirements.

Elementary school projects.—(1) A study of material for the preparation of two bulletins on curriculum building; (*a*) As a guide to the construction of curricula on character education; (*b*) as a guide to the construction of curricula on narcotic education.

(2) A study of material in the preparation of a bulletin on conservation of animal life in Alaska.

(3) A bulletin on curriculum building as a guide to the construction of curricula in safety education for the use of school administrators.

(4) A bibliography of helps for schools in celebrating the George Washington Bicentennial.

Home-economics education.—In cooperation with committees appointed during the conferences on home-making, the following studies are in progress: (1) The criteria for evaluating home-economics administration regarding the following relationships: Professional, teachers, curriculum, equipment and supplies, school patrons, and vocational guidance; (2) the minimum essentials of the home-economics curriculum to meet present-day needs; (3) criteria by which the accomplishments of home-economics teaching can be measured by standardized tests and rating scales; (4) outside activities of students of home economics as compared with those who have had no home-economics training; (5) criteria by which a superintendent or principal of schools may judge the educational effectiveness of the home-economics department; (6) available curriculum materials concerned with attitudes and responsibilities of home makers under present conditions of living; (7) major differences between home-economics practices and the needs of home makers as shown by these research studies; (8) changes in the present home-economics practices on the elementary and secondary school levels which might be made to the advantage of school boys and girls; (9) the organization of home-economics content into large units of closely related functioning materials; (10) the effectiveness of home-economics materials in meeting the changing interests of adolescent girls; (11) progressively difficult levels for the home-economics curriculum; (12) the history of home economics in the United States; (13) newer interpretations of home economics; (14) next steps in home-making education; (15) goals for the American home; (16) curriculum ma-

terials for home and family life based on scientific knowledges in the field of biology.

Physical education.—(1) A study of the status of physical education, health education, and hygiene as required subjects of all teacher-training curricula given by normal schools, teachers colleges, and departments of education in colleges and universities.

(2) A detailed analysis of the requirements regarding physical education, as set forth in the catalogues of about 900 institutions offering teacher-training curricula, was supplemented by questionnaires and letters regarding various phases of the work.

Radio education.—(1) A study of the activities of educational broadcasting stations.

(2) A compilation of data pertaining to the use of radio in the schools, colleges, and universities, and in informal education.

(3) A study of the use of radio in education in foreign countries, which will bring up to date similar information gathered by the advisory committee on education by radio in 1929. The United States Department of State is assisting the Office of Education as it did the advisory committee by gathering information through the offices of the United States consuls.

(4) A study of experiments, researches, evaluations by educators, programs, and other material on education by radio.

School building problems.—(See Report of the National Advisory Council on School Building Problems in Section 2, Coordination of Research Activities.)

EDITORIAL DIVISION

W. D. BOUTWELL, Chief

Responsibility for diffusion of "statistics and facts as shall show the condition and progress of education" is a function of the Office of Education which falls directly on the editorial division.

In the past year "statistics and facts" have been diffused through the distribution of 562,100 free copies of 90 publications and through the distribution of 600,000 copies through the Superintendent of Documents, Government Printing Office.

Following is a record of the number of publications edited, proofread, and distributed by the editorial division:

Type of publication	Pages of manuscript	Pages of proof read	Free copies distributed
Bulletins (44)	11,154	3,632	205,250
Pamphlets (8)	222	162	36,500
Leaflets (5)	65	73	16,000
Reading courses (7)	44	43	37,500
Others: (25) catalogues, handbooks, etc	1,573	521	266,850
Total	13,058	4,431	562,100

The question arises: To whom shall the Office of Education "diffuse" information collected? If education is accepted as beginning with the cradle and ending with the grave then some part of this information may be important to every citizen of the United States. The program of diffusion does embrace all American citizens. All the bulletins of statistics and facts go to universities, colleges, teachers colleges, State departments of education, and major libraries

creating an ample reservoir for leaders and students of education. Short abstracts and summaries go to 600 local, State, and national educational periodicals for dissemination to the 800,000 teachers and 25,000,000 students. These abstracts for educational periodicals are used by the National Congress of Parents and Teachers, magazines, and newspapers so that outstanding facts and statistics are, indeed, diffused to the entire reading public of the United States.

Office of Education publications are sent free to selected agencies and officials such as libraries, State departments of education, educational research divisions, superintendents of schools, college presidents, and others. Keeping up-to-date mailing lists which total more than 50,000 addresses is one of the duties of this division. In addition to sending publications on mailing lists this office answers thousands of inquiries from teachers, parents, and school administrators. During the past year 40,566 letters were received and answered. Hundreds of these requests were forwarded to us by members of Congress.

Following are improvements inaugurated in diffusing educational data during the past year:

(1) *Speeding up the Educational Directory.*—No publication of the Office of Education is more eagerly sought than the annual Educational Directory which lists 15,000 names and addresses of American school officials. Two parts of the directory containing the majority of names reached the public this year on February 7, more than three months earlier than last year. The 15,000 names were checked as of January 1, 1931.

(2) *New catalogue of publications.*—The Office of Education has annually published a List of Publications Available. Items in it were classified by number and year. An individual desiring to know what publications the office had on home economics, for example, had to search the entire list. This year the Superintendent of Documents list of Government publications on education, which is classified by subjects, was incorporated in a new and more useful catalogue.

(3) *Improving appearance of bulletins.*—Attention has been given during the past year to improving the appearance of Office of Education publications. Attractive typography was a determining factor in the decision by one American professional association to order 50,000 copies of one publication.

(4) *New handbook issued.*—To satisfy the many requests for information on the work of the Office of Education a brief, concise handbook of the duties, history, and recent publications of the Office of Education was written and printed. Summer sessions of teachers colleges requested 3,000 copies for distribution to student teachers.

(5) *Dollar packets.*—The difficulty of sending small amounts of money to the Superintendent of Documents has acted as a barrier to the distribution of Government publications. To circumvent this obstacle the Office of Education prepared and distributed nine dollar packet lists tabulating groups of bulletins on specific subjects, such as kindergarten, primary, rural schools, health, etc., which could be obtained by sending a personal check for $1. The Superintendent of Documents reports that these and other announcements of publications have materially increased the distribution of Office of Education publications.

(6) *Service at educational meetings.*—Publications of the Office of Education were displayed at 14 educational meetings during the past year. At the Los Angeles meeting of the National Education Association alone more than 1,000 requests for Office of Education publications were received.

(7) *School Life.*—Information on education collected by the Office of Education is given to the educational world most quickly through School Life, the official monthly journal of the office, which is distributed for a fee of 50 cents per annual subscription. Requests for School Life increased more than 1,345 between January and June.

2. COORDINATION OF RESEARCH ACTIVITIES

The increase in number of entries reported to this office for inclusion in the annual bibliography of educational research (1,540 in 1926–27; 4,475 in 1929–30) testifies to the enormous interest and activity in the study of educational problems. To encourage such study and yet to assist in avoiding useless duplication of effort, the staff of the office has engaged in several coordinating activities: First, making information available concerning studies on specific problems, either completed or in progress; second, suggesting and, in some cases, outlining certain important studies which it was thought would be of interest to investigators; third, working in committee, either in an advisory or participating capacity, with individuals or organizations interested in conducting a particular investigation. A statement is presented to show the cooperative enterprises in which members of the staff have engaged during the past year. They represent varied amounts of responsibility for the direction of projects or consultation with those in charge.

(1) With the approval and very generous cooperation of the Religious Education Association, the Federal Council of Churches of Christ in America, the Jewish Welfare Board, and the National Catholic Welfare Conference, this office has instituted a plan for the issuance of an annual bibliography on religious education, including reports representative of the work done by the various denominational religious education agencies. The first of these publications will be issued early in 1932.

(2) With the cooperation of the Office of Education the Society of Curriculum Specialists has selected a committee of its members to secure and prepare for publication a series of curriculum units in the elementary field evaluated by members of the society. This study will serve partially to summarize the deliberations of the last meeting of the society.

(3) The Office of Education has from time to time been urged to coordinate the reports of research in education done in graduate schools. The Bibliography of Educational Research has assisted by listing masters' and doctors' theses each year. Following out the service of listing the research studies, the office has, with the approval of the deans of the schools of education, requested the various schools to submit copies of the theses done in completion of the requirement for the doctorate for deposit in the library of the Office of Education. The response has been most generous; more than a hundred theses

and abstracts have so far been received. These are subject to interlibrary loan. A further extension of this program should result in published abstracts of theses not already available in published form.

(4) Continuing the program instituted by the committee on cooperative research, a series of studies dealing with the educational problems of intermediate-grade children has been begun with the assistance and advice of various members of the group.

(5) An economic and social study of the southern Appalachian Highlands is in progress. The division of special problems has assumed responsibility for a general survey of the educational opportunities obtaining in 204 counties within this region. The findings are to be interpreted in the light of other social and economic facts investigated by various agencies of the United States Department of Agriculture and by representatives from the several States in which these counties are located.

(6) The curriculum commission of the National Council of Teachers of English, which is now engaged in a 3-year program in developing an English curriculum which shall extend through the elementary, secondary, and higher education levels, has invited the assistance of the division of research in the coordination of the program at the various levels.

(7) In connection with the White House Conference on Child Health and Protection a number of the members of the staff assisted in the collection and appraisal of information, served as members of various committees, and rendered informational and advisory services relative to several phases of the work of the conference.

(8) Through the engineering foundation and the American Telephone & Telegraph Co. analysis is being undertaken of approximately 25,000 questionnaires filled in by alumni and former students during the survey of land-grant colleges and universities. Occupations and earnings for the former students in relation to courses of study pursued at college are being carefully studied.

(9) A study of military education, in cooperation with the research organization on military education established through the New York Community Trust, is under way.

(10) A study of the aims and objectives of graduate education is being conducted in cooperation with members of the staff of Howard University.

(11) At the request of the State Department of Public Instruction of Pennsylvania the chief of the division of American school systems is serving as the associate director of a comprehensive study of the schools of that State undertaken for the purpose of planning a 10-year program. Other members of the staff are acting as consultants in various phases of the study.

(12) Cooperation was continued with the American Vocational Association in a study of standards and of pupil abilities in industrial arts courses in the junior high school grades.

(13) A member of the staff of Ohio State University was assisted by the division of special problems in a study of provisions for the education of crippled children. The study was published by the Office of Education.

(14) A study of the availability of schools in rural communities was made by a committee of the National Society for the Study of

Education and published by that society in its Thirteenth Yearbook, Part I, Chapter III. The chief of the division of special problems was chairman of the committee, and other members of the division assisted in the work.

In addition to these cooperative undertakings, three members of the staff are now assigned to full-time service and six others to part-time service in connection with the work of the national surveys.

NATIONAL ADVISORY COUNCIL ON SCHOOL BUILDING PROBLEMS

The National Advisory Council on School Building Problems is an example of a type of cooperative undertaking by the Office of Education. As is explained in the following outline it is made up of school building experts in different regions of the country with whom the specialist through yearly local conferences organizes and carries on research studies in school-building problems.

Organization and purposes of the council.—The National Advisory Council on School Building Problems was organized under the auspices of the Office of Education at the request of the State commissioners of education and State superintendents of public instruction, in order to secure (1) comprehensive data on methods of solving school-building problems in different parts of the country and other different types of school organization; (2) expert analysis of the data collected; and (3) constructive suggestions in regard to methods of solving school-building problems.

The council was organized because the school-building problem has become a highly technical one which requires for its solution the cooperative efforts of many different types of experts—educators, school-building architects, landscape architects, health specialists, and heating, ventilating, lighting, and sanitation experts. Furthermore, school-building problems can not be studied at long range. They must be studied in terms of actual school-building situations. In other words, if the Office of Education is to serve as a national clearing house on school-building problems, it is necessary to secure information through decentralized geographical units, to mobilize in those units the expert knowledge of those actually engaged in solving school-building problems, and to carry on through direct contact with these regional units continuous research and service on school-building problems. The National Advisory Council on School Building Problems is the means by which the Office of Education carries on these research studies, secures expert interpretation of the data collected, and, in turn, makes available through the clearing-house facilities of the office the results of these studies and interpretations.

The advisory council as now constituted, consists of 11 regional councils—the New England, New York, Middle Atlantic, Great Lakes, North Central, Central States, Rocky Mountain, Northwestern, Sierra Nevada, Gulf States, and South Atlantic. There are seven members of each regional council, as follows: 1 State superintendent, 3 city superintendents, 1 county superintendent, 1 school-board member, and 1 architect who is always the regional director of the American Institute of Architects, appointed by the president of the American Institute of Architects as that organization's representative for each region. In addition, all directors of divi-

sions of schoolhouse planning of State departments of education serve as ex-officio members. In order that each regional group may secure the expert advice of school-building architects in its region, the American Institute of Architects representative of each regional council recommends the appointment of school-building architects in his region as advisory architects.

Work accomplished, 1930–31.—The advisory council voted at its first meeting in the spring of 1930 to undertake as its first piece of research work a study of "The Functional Planning of School Buildings." This study was undertaken because it was recognized that studies of school buildings are significant only when they are considered in relation to the educational uses to which the buildings are to be put. It was decided to devote the study during the first year to elementary school buildings, and to follow this in the second and third years by studies of junior and senior high-school buildings. Seventy-five cities in 39 States cooperated with the advisory council and the Office of Education by preparing exhibits, each one of which included a plot plan of the site lay-out, photograph of the exterior of the building, floor plans of the building, statistical data covering some 200 points as to school-building surveys, size of site and playgrounds, type of building, kinds of rooms and their dimensions, costs, and educational programs.

Second annual conference.—The second annual conference of the advisory council was held in Detroit, Mich., February 24, 1931, with the chairman, Commissioner Cooper, presiding. In describing the work of the council, Commissioner Cooper said, "We believe that this volunteer council furnishes an excellent device to perpetuate American educational traditions. It is consistent with State and local control of school matters. It avoids the tendency to uniformity and rigidity that is likely to develop from control by a central governmental agency, and its connection with the office makes available the clearing-house facilities and the fact-collecting machinery of the Federal Government.

"At the present time, the total value of the public-school plant in the United States, including sites, buildings, and equipment, is $5.486,938,599. We know that from 1924 to 1928 approximately $400,000,000 was spent on the public-school plant yearly. In view of this investment, it is clear that such an expert body as the National Advisory Council on School Building Problems cooperating with this office should not only be of great value in assisting in the better functional planning of school buildings but it should, also, through its research studies, contribute greatly to wise and far-sighted economy in the expenditure of school-building funds, so that each community may secure the full educational value of the money invested."

Exhibits from the 75 cooperating cities were displayed at the conference, and the secretary submitted a preliminary report upon The Functional Planning of School Buildings. There were about 100 delegates in attendance at this meeting. The following resolution was passed unanimously:

Inasmuch as there is available in the wealth of the material that has been gathered in the research study undertaken by the council, much excellent guidance material and vital information in the field of special interest to this council,

Therefore, your committee recommends that we request a continuance of the National Advisory Council on School Building Problems as a permanent organization.

The officers for the year 1931–32 elected at this meeting were: Chairman, Dr. William John Cooper, United States Commissioner of Education; vice chairman, Dr. Charles L. Spain, deputy superintendent of schools, Detroit, Mich.; secretary, Alice Barrows, specialist in school building problems, Office of Education. The chairman of each regional council is: New England region, A. J. Stoddard, superintendent of schools, Providence, R. I.; New York region, Hon. Frank P. Graves, State superintendent of public instruction, Albany, N. Y., represented by Joseph H. Hixson, director of school buildings, New York State Department of Education; Middle Atlantic region, Ben G. Graham, superintendent of schools, Pittsburgh, Pa.; South Atlantic region, Hon. A. T. Allen, State superintendent of public instruction, Raleigh, N. C.; Great Lakes region, Charles L. Spain, deputy superintendent of schools, Detroit, Mich.; Central States region, Millard Lefler, superintendent of schools, Lincoln, Nebr.; North Central region, Carroll R. Reed, superintendent of schools, Minneapolis, Minn.; Gulf States region, Hon. S. M. N. Marrs, State superintendent of public instruction, Austin, Tex.; Northwestern region, Charles A. Rice, superintendent of schools, Portland, Oreg.; Rocky Mountain region, Homer W. Anderson, deputy superintendent of schools, Denver, Colo.; Sierra Nevada region, Hon. Vierling Kersey, State superintendent of public instruction, Sacramento, Calif.

3. EDUCATIONAL SERVICE

One of the important functions of this office is the personal service rendered to educational agencies in need of professional assistance in carrying on their regular work or in the solution of their particular problems. Sometimes this involves only temporary help; sometimes it involves a continuous advisory or service relationship. During the past year considerable time was devoted by members of the staff to this type of work. A statement of some of the more important services follows:

Surveys.—In December, 1930, the Office of Education's part of the Buffalo (New York) public-school survey was completed. The report, printed in two volumes, was distributed by the Buffalo Municipal Research Bureau (Inc.), White Building, Buffalo, N. Y.

During the early spring of 1931, the Board of Education and the Chamber of Commerce of Youngstown, Ohio, invited the Office of Education to make a survey of the public schools of that city. Considerable information already has been collected. Members of the staff of the Office of Education will visit Youngstown and begin the actual survey in September, and it is hoped that the report will be ready for printing by December 1, 1931.

Brookings Institution, of Washington, D. C., has invited the Office of Education to make a survey of the publicly controlled schools of the State of Mississippi. Preliminary work already has been done, and it is hoped that the report will be ready for printing by November 15, 1931.

Early in 1931, the United States Department of Agriculture asked the Office of Education to cooperate in a social and economic survey

of the southern Appalachian Mountain region, the Office of Education to be responsible for that part of the survey relating to education. The most of the work of the year 1931 will be devoted to compiling information now available in the various States located in the region and in the offices of the United States Government departments. It is contemplated that about three years will be required for the completion of the survey.

During April, 1931, a survey was made of home-economic education in the junior and senior high schools of Montclair, N. J., with recommendations for curriculum revision.

The survey of the school-building situation in Warwick, R. I., was completed and issued as Office of Education Bulletin 1930, No. 33.

A survey of the Park View School, Washington, D. C., was made in May, 1930, at the request of the Board of Education of the District of Columbia, and the report was submitted in September of that year.

Reports on the surveys of the State-supported institutions in both Oregon and Arkansas were completed by the division of colleges and professional schools and published by the Office of Education.

The division of special problems and the division of statistics assisted a committee of the Vermont Commission on Country Life to make a survey of rural education in that State. A report of the study has been made to the commission.

Professional assistance to educational agencies.—The research division, in so far as it is possible, regularly renders assistance to educational institutions and other educational agencies asking for professional advice and service in the solution of problems arising in connection with the work they are doing. Members of the staff are frequently asked to prepare or review curriculum material: A course of study in hygiene was outlined for the committee on education in hygiene in secondary schools, of the American Physicians Association; a report of the development of nursery schools and kindergartens was prepared for the American Association of University Women; the specialist in elementary curriculum has assisted the State Department of Education of Michigan and Loudoun County, Va., in curriculum construction; assistance was given by the specialist in school hygiene to the nutrition division of the National American Red Cross in the preparation of study materials on child development and parent education; advice was given the American Child Health Association, the State Department of Public Instruction of Pennsylvania, and the health director of the Detroit city schools in preparing courses of study and classroom materials. At the request of the Board of Education of Wheeling, W. Va., through its superintendent, a study was made of the programs in industrial arts and vocational-industrial education and recommendations were made relative to these to the Board of Education. The chief of the division of statistics assisted the State Department of Education of South Carolina in the revision of its system of records and accounts.

Members of the office served as members of various committees: The associate specialist in higher education assisted as a member of the advisory committee on a Liberal Arts College for Women of the

University of Virginia in planning for the future development of this phase of the educational program of the university, and as chairman of the commission on education of the Y. M. C. A. College; assistance was rendered the committee on State programs of the National Vocational Guidance Association and the Vocational Bureau of New York City; the Vocational Research Bureau was assisted in the study and development of plans to promote the organization of school clubs as a means of discovering life interests; a member of this division serves on request as a member of a subcommittee of the President's Emergency Committee on Employment; the National Committee on Research in Education has had the services of the specialist in secondary education as its secretary; the Director of the Census had the service of the chief of the division of statistics in the work of the committee on statistics of institutions for mental diseases; assistance was given the National Vocational Guidance Association in plans for the work of the committee on State guidance programs. Services as a committee member were rendered by the specialist in nursery-kindergarten-primary education to the following educational committees: Executive committee of the Washington Child Research Center, advisory board of the Progressive Education Association, editorial committee of the Association for Childhood Education, teacher-training committee of the National Association for Nursery Education. The specialist in home-economics education is a member of the advisory committee of the Journal of Home Economics and an adviser to the department of supervisors and teachers of home economics.

One of the most important committee assignments was that of the chief of the division of statistics and a member of the division of colleges and professional schools to cooperate with the national committee on standard reports for institutions of higher education. This study of the financial reports of colleges and universities is made in an effort to bring about a more uniform method of making reports.

Through the efforts of the specialist in Negro education, a national advisory committee on the education of Negroes, of which the specialist serves as executive secretary, was appointed. In cooperation with the National Education Association the committee planned a nation-wide Negro-education program in connection with American Education Week.

The division of foreign school systems, at the request of the Department of State, made a statement of the kinds of data the foreign offices should furnish; and at its own initiative asked for specific information about higher education in Austria, Holland, Poland, Estonia, Chile, the Dominican Republic, Panama, Turkey, and Brazil; annual education reports from those parts of the British Empire not having responsible self-government; the application in foreign countries of radio to education; the Scuola Centrola in Bucharest; a pedagogic degree issued by the University of Florence; private commercial and industrial schools in Cuba; technical gymnasia in Sweden; veterinary colleges in India; and education in Siam and in the Dominican Republic. This material is essential to the division in maintaining its information and advisory service.

This division also evaluated for college and university registrars and State departments of education the credentials for 590 students

coming from 67 different countries. Forty-four of these cases came from 15 Latin American countries; 134 from 15 divisions of the British Empire; 117 from 9 Germanic language countries and their colonies; 81 from 5 Slavonic language countries; 30 from Ugro-Finnish nations; 79 from 6 European Latin language countries and their colonies; 23 from 5 nations in the Near East; 71 from 4 in the Far East; and 11 from 3 of the outlying parts of the United States. Seventy-two cases were reviewed.

In the process of gathering material with which to carry on its regular service work, the division made translations from 8 Slavonic tongues, 7 Germanic, 6 Latin, 5 Ugro-Finnish, and Greek. The total number of words translated from 27 different languages was 123,770. Also purely formal translations were made for the following offices of the Department of the Interior: Secretary's office, Bureau of Pensions, Bureau of Reclamation, General Land Office, Mails and Files, National Park Service, Gallinger Hospital, Geological Survey, and National Advisory Committee on Illiteracy.

The chief of the service division has worked with several of the Federal departments and bureaus. He has cooperated with the President's Conference on Home Building and Home Ownership by serving as a member of the committee on home-information centers, specific service being rendered in connection with the section on information services of libraries, museums, colleges, public schools, and other civic agencies. He has also worked with the Bureau of Prisons of the United States Department of Justice in devising an educational program for Federal prisons and correctional institutions. Several visits were made to the institutions and a number of conferences were held during the year.

Field studies.—Most of the periodic studies for which this office is responsible depend upon the questionnaire for the collection of data. As this list of periodic studies increases it becomes increasingly important that the reliability or completeness of these questionnaire studies be increased through field studies made by members of the staff. For this reason, during the past year four members of the division of statistics spent approximately five months each in the field covering the entire United States, assisting in the collection of information to be included in the Biennial Survey of Education for 1928–1930. It is probable that other types of studies, such as descriptive accounts of good practices and cooperative experimentation, will necessitate an increasing amount of field study as a means of collecting necessary data.

Examples follow of field studies carried on during the past year:

(1) The chief of the division of foreign school systems traveled for eight weeks in England, France, and Belgium, establishing ways of exchanging educational data with those countries and also studying their educational systems for the purpose of supplying useful information in this country. As a result of the latter objective a comprehensive manuscript on education in Belgium has been prepared for publication by the Office of Education.

(2) During August and September the specialist in school legislation visited and studied the organization and work of each of the following international institutions engaged in educational cooperation among different countries: International Institute on Intellec-

tual Cooperation at Paris, International Bureau of Education at Geneva, and the International Educational Cinematographic Institute at Rome.

(3) The chief of the division of special problems spent six weeks in Alaska during May and June studying the administration, supervision, curriculum, and personnel of the schools for native people, and in gathering such other information as is valuable for a report on educational conditions and progress in that Territory. Schools and officials throughout the interior as well as in the southeastern section were reached during the visit.

(4) In connection with the Survey of Secondary Education and also in connection with a study of elementary rural schools under the direction of Jeanes supervisors, the specialist in Negro education visited 97 rural and city schools in 12 States. The purpose of these visits was to obtain first-hand information concerning the schools and educational conditions in order to supplement the data collected by correspondence.

(5) For the purpose of securing information on school practice in the education of speech defectives, the consultant in hygiene and health education made a number of visits to progressive school systems.

Writings and addresses.—During the year members of the staff contributed to educational publications and delivered addresses before educational organizations. An article entitled "Ten Points to be Considered in Planning Shop Layouts and Equipment" was prepared by the specialist in industrial education and published in the American School and University. Under the caption "Special Problems in the Education of Rural Children," a publication was prepared in cooperation with the Department of Rural Education of the National Education Association. A series of articles on city school programs for the education of exceptional children has been prepared by the division of special problems and published in School Life. Articles by members of the staff appeared also in Hygeia, American School Board Journal, School Executives Magazine, School and Society, Nation's Schools, American Physical Education Association Research Quarterly, Elementary English Review, Yearbook of the Department of Classroom Teachers, and in the Proceedings of the American Physical Education Association, the National Tuberculosis Association, and the American Student Health Association.

Numerous addresses were made by staff members of the division at meetings of international, national, State, and local educational organizations, as, for example, the National Education Association, Society for the Promotion of Engineering Education, American Chemical Society, county school superintendents' associations of Idaho and North Dakota, State Vocational Association of Pennsylvania, Childhood Education Association, Pan-American Child Congress, Pan-Pacific Women's Conference, New York Principals' Conference, National Council of Teachers of English, National Congress of Parents and Teachers, National Association of Platoon Schools, Norfolk Elementary School Teachers, Johns Hopkins University graduate students in education, Geography Club of Western Pennsylvania, Michigan Schoolmasters' Club, National Commercial

Teachers' Federation, Department of Adult Education, the Institute for Education by Radio, and the American Library Association.

Conferences.—Members of the office assisted in organizing and conducting the National Conference on Parent Education held in Hot Springs, Ark., in May, 1931. The conference was called by the Commissioner of Education at the request of the National Congress of Parents and Teachers. About 500 leaders in various phases of education were assembled from all parts of the United States, two delegates coming from Hawaii. Specialists discussed the changing social and economic conditions affecting home and family life; the training of lay and professional leaders in parent education; parents' problems at different age levels of their children; and the utilization of existing facilities for parent education.

The National Committee on Home Education met in Washington, D. C., November 22–24, 1930, at the call of the Commissioner of Education to review progress in this field and to discuss the problems of discovering facilities for education in the home.

On November 10–11, 1930, the Office of Education held, at the request of the Iowa State College of Agriculture and Mechanic Arts and the State University of Iowa, at Ames, Iowa, a conference on home-economics education for the West North Central States (Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, and Kansas) to discuss "home and family life in a changing civilization."

On April 8–9, 1931, a similar conference of the Northwest States was held in cooperation with the State University of Idaho and the State College of Washington, at Spokane, Wash., at the time of the annual meeting of the Inland Empire Education Association. The theme of this conference was "Education for the Changing American Home." As a result of these two conferences several very important studies pertaining to an enlarged home-economics program are under way.

A conference on radio educational problems, called at the request of several land-grant institutions having broadcasting stations, was participated in by this office on October 13, 1930. Many groups of educators and several groups within the radio industry were represented. In accordance with the request of this conference the national committee on education by radio was organized.

One type of educational service of value both to members of the staff and to students of education outside the office is that for which the library division is responsible. The report of this division follows:

LIBRARY DIVISION

SABRA W. VOUGHT, Chief

The work of the library has been considerably handicapped during the year by the fact that three of the rooms had to be given up for another department. These rooms contained the bound file of college catalogs and the unbound foreign periodicals. This necessitated the removal of about 10,000 volumes to the ground floor. The office of the library and the reading room were also moved to other rooms on the sixth floor. The reading room is now housed in a room somewhat larger than the one previously occupied, while the office went

into a smaller room. The circulation desk and the desk of the assistant who checks in the current periodicals are now both in the reading room, which reduces the space available for readers. In spite of this difficulty 3,624 people have used the room as readers and 4,854 books have been charged out at the loan desk.

The Bibliography of Research Studies in Education for 1928–29 was issued as Bulletin, 1930, No. 23, and the Bibliography for 1929–30, which will be issued as Bulletin, 1931, No. 13, is in press. As an outcome of the conference on cooperative research held at Atlantic City, N. J., in February, 1930, a list of research studies in education undertaken by city school systems was issued in mimeographed form as Circular No. 18. This included studies recently completed, those in progress, and studies contemplated for the school year 1930–31. A similar list of studies undertaken by State departments of education and State education associations was issued as Circular No. 31. There was prepared for the Educational Directory a list of directors of educational research in State departments of education, State education associations, city school systems, universities, colleges, normal schools, and independent organizations. There was also issued as Leaflet No. 2 a pamphlet on the Organization and Functions of Research Bureaus in City School Systems.

The record of current educational publications is now issued on a quarterly basis. The selection of books and articles to be included is made by 13 specialists under the general editorship of Martha R. McCabe, assistant librarian.

The library has assisted in the preparation of the Educational Directory and the bulletin on Statistics of Public, Society, and School Libraries. It has also continued the work of preparation of bibliographies to be sent in answer to the many inquiries which are received from teachers and students. These bibliographies now take the form of short annotated and selected lists which are to be issued frequently in response to the demand, and long complete bibliographies to be prepared in general by specialists within or outside the Office of Education.

An attempt is made to supply the demands for books which are needed by the specialists in the office. In addition to the books which belong to the library many are borrowed from other libraries as interlibrary loans. During the year 219 books were borrowed from the Library of Congress and 198 from other libraries in various parts of the country. The cataloging section continues to cooperate with the Library of Congress by preparing copy for catalog cards for educational publications.

A large part of the work of the division besides furnishing books and information for the use of the specialists in the office, is devoted to answering the many inquiries that come by correspondence. These inquiries relate to the whole field of education and library service. Many students from the educational institutions of the District also use the library for their supplementary reading, which increases very greatly the work of the assistants in charge of the reading room.

A chapter for the biennial survey was prepared by the librarian and the associate specialist in school libraries. This chapter covered general library progress and school library development for the past

decade. The associate specialist in school libraries has contributed articles to the United States Daily and other periodicals. The librarian has prepared a column for each issue of School Life on outstanding articles in curent periodicals.

Two bibliographies in which the library cooperated have been printed during the year: Bibliography of junior colleges, Bulletin, 1930, No. 2; Bibliography on the honor system and academic honesty in American schools and colleges, Education Pamphlet No. 16.

Respectfully submitted.

WM. JOHN COOPER, *Commissioner.*

The SECRETARY OF THE INTERIOR.

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UNITED STATES DEPARTMENT OF THE INTERIOR
RAY LYMAN WILBUR, Secretary
OFFICE OF EDUCATION
WILLIAM JOHN COOPER, Commissioner

ANNUAL REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR THE

FISCAL YEAR ENDED JUNE 30, 1932

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1932

THE OFFICE OF EDUCATION

Created as a department March 2, 1867

Made an office of the Interior Department July 1, 1869

COMMISSIONERS

HENRY BARNARD, LL. D.
March 14, 1867, to March 15, 1870

JOHN EATON, PH. D., LL. D.
March 16, 1870, to August 5, 1886

NATHANIEL H. R. DAWSON, L. H. D.
August 6, 1886, to September 3, 1889

WILLIM T. HARRIS, PH. D., LL. D.
September 12, 1889, to June 30, 1906

ELMER ELLSWORTH BROWN, PH. D., LL. D.
July 1, 1906, to June 30, 1911

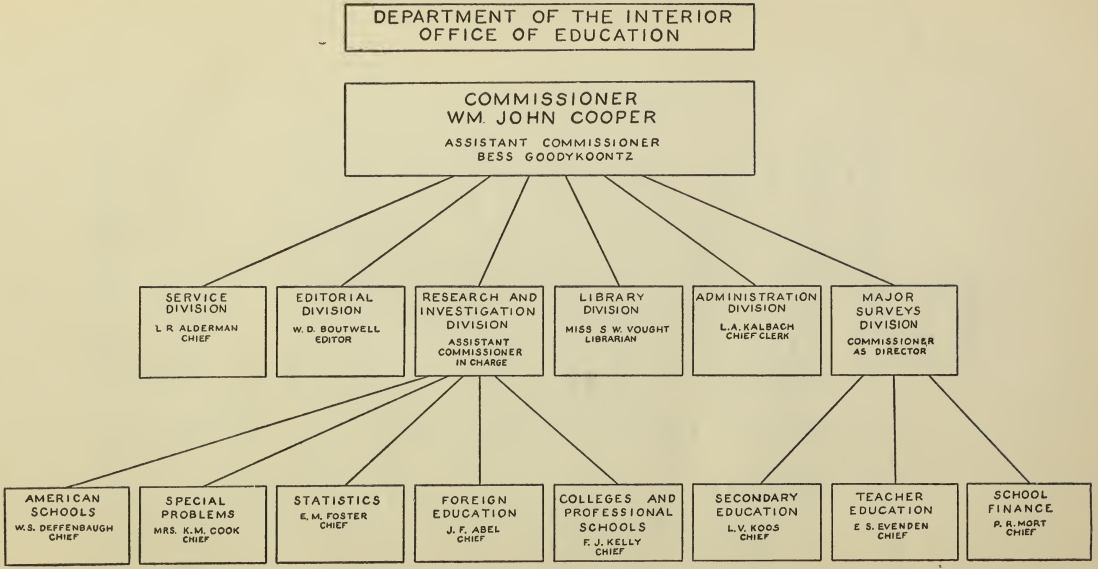
PHILANDER PRIESTLEY CLAXTON, LITT. D., LL. D.
July 8, 1911, to June 1, 1921

JOHN JAMES TIGERT, M. A. (OXON), ED. D., LL. D.
June 2, 1921, to August 31, 1928

WILLIAM JOHN COOPER, ED. D., LITT. D., LL. D.
February 11, 1929

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ORGANIZATION OF THE OFFICE OF EDUCATION, JUNE 30, 1932

ANNUAL REPORT OF THE COMMISSIONER OF EDUCATION

DEPARTMENT OF THE INTERIOR,
OFFICE OF EDUCATION,
Washington, D. C., July 31, 1932.

SIR: A year ago your commissioner referred to the year ended in June, 1931, as the year in which the Office of Education had been endeavoring to find its real place in American education and to divest itself of all functions not belonging to it. The real purpose of the office is, in my opinion, to find out facts about education in all its various phases throughout the several States and in foreign countries and to disseminate such facts in order to assist the people in the several States to establish more efficient systems of schools. We had accomplished the transfer to the Indian Service of our work in connection with the native races of Alaska, with the exception of a piece of research which was conducted under the direction of Stanford University with the aid of the Carnegie Corporation. That relieved the office of all administrative responsibilities save the administration annually of $2,550,000 granted by Congress for the land-grant colleges, which duty was assigned to the office in 1890 by the Secretary of the Interior. This work now takes a comparatively small part of the time of one specialist since it has not been necessary up to the present time to spend any time in the field to investigate the expenditure of this fund.

APPROPRIATIONS

During the year ending June 30, 1932, this office has been operating on a budget of $572,000, allotted as follows: $280,000, salaries; $25,000, general expenses; $75,000, national survey of secondary education; $80,000, national survey of teacher education; $50,000, national survey of school finance; $62,000, printing and binding.

In two items particularly the appropriation has fallen short of the office's needs. Those items are salaries and printing and binding. For the year ending June 30, 1932, the regular pay roll amounted to $287,060, or $7,060 more than the amount appropriated. Additions to the staff are urgently needed. In view of the work which this office should do regularly in order to provide the information called for by school officials and research workers it should have a regular pay roll of not less than $350,000.

The second inadequate item was for printing. As a research office the chief way in which the work of its entire staff can be made available is through the printed page. This year 13 manuscripts reporting findings of long and sometimes expensive investigations had to

be held over for printing on next year's funds. The office should have not less than $80,000 annually for this purpose.

But this year has witnessed the serious blow of the depression. Federal appropriations for 1933 were reduced drastically. Along with other bureaus we also suffered; but due to the fact that the nature and practical value of research are not always understood, this office suffered more heavily than some others. As we begin another year we must face the fact that the present emergency bids fair to affect the Office of Education adversely and seriously in its present efficiency, prestige, and future development. The present emergency for education generally is one not only of reduced appropriations but of lack of confidence on the part of governing bodies and the general public in the powers claimed for education in general and the need for governmental participation in education or any social regulation in particular. The duration and uncertainty have been not the least troubling features of the emergency. In August of last year the Office of Education was asked to prepare its estimates for expenditures for the next fiscal year beginning July 1, 1932. This it did very carefully, bearing in mind the admonitions to keep all requests for appropriations to a minimum. In September the Bureau of the Budget acted, making an allowance somewhat under the original request. In March the Department of Interior's appropriation bill was passed by the House of Representatives, cutting the Office of Education's budget 11 per cent further. In April the Senate accepted its Appropriations Committee's report and passed the Department of Interior's appropriation bill, giving the office a further cut of 26 per cent. This bill, which is a reduction of 34 per cent under the Bureau of the Budget's estimate, was accepted by the House and signed by the President. Since that time the printing appropriation has been reduced 15 per cent further.

A brief explanation may be made of what this means in terms of operating efficiency. As it stands at the present time, unless further legislation is passed affecting appropriations, to operate on our present reduced salary budget would require either the furlough of every employee in the office, including the commissioner, for at least a half month in addition to the compulsory furlough of a month, or the discharge of from 10 to 15 employees. This is a serious matter in an office as meagerly staffed as is this one, where the discharge of one specialist means also the closing out of service and research in a whole field of education. For example, there is in the office only one person to keep an up-to-date record of educational legislation, to issue summaries of legislation on particular topics, to answer inquiries from legislators, State superintendents, and other officials. Still another individual represents the office in the field of industrial education and guidance; another must be responsible for whatever follow-up there is of the national survey of secondary education; and still another for assistance to school officials and to others in school finance. When one of these individuals goes, the work in his field is dropped. To choose between eliminating health education, kindergarten-primary education, school building service, or professional education, is a task for a Solomon.

A second serious result of the reduced appropriation lies in the restriction in types of research which may be carried on. Research by questionnaire only sets definite limits in the types of problems which may be undertaken and in the character, accuracy, and completeness of the data which may be secured. For several years the research staff in the office has worked conscientiously to further investigation through field studies, which, though local or sectional, are of universal interest to educators. This past year has seen the development of several such field studies. However, the present decreased appropriations for travel offer a considerable set-back to the continuance of this type of investigation.

Finally, the reduction in appropriation has two other serious consequences: One, reductions in the number of publications and in the number of copies of publications available for distribution, which is a research agency's principal means of making itself heard, and the other, the suspension of the program of national surveys, both of which are discussed later. Whether these reductions shall be temporary or permanent, and whether there shall be retrenchments in the Federal office's fundamental program or only suspension of certain activities is the problem to be faced.

STAFF

During the fiscal year 1932 five new members were added to the staff, as follows: Senior specialist in education by radio, senior specialist in education of physically handicapped children, specialist in tests and measurements, specialist in western European education, and assistant clerk-stenographer. In addition, the senior specialist in secondary education who had been assigned to the survey of secondary education and the specialist in school finance who had been assigned to the survey of school finance were transferred to the regular staff of the office. Two members of the staff were placed on the retired list and the positions formerly held by them were abolished due to the lack of funds. The regular staff now numbers 100. For the fiscal year 1934 provision should be made on the regular roll for the senior specialist in teacher training now assigned to the survey of teacher education, for a specialist in the education of oriental peoples, and for two assistant clerk-stenographers. There is great need for additional clerical assistance for the various specialists.

Reallocation of four positions to higher grades caused an increase in the salary roll of $3,500 per annum.

QUARTERS

During the year the office was again moved, and the staff, with the exception of the library, has been brought together on the first and second floors of the building. The library remains on the sixth floor, where considerable additional space has been assigned to it. Additional metal shelving has been provided and other library facilities have been added which materially improve its service. It is hoped that in the near future space located nearer to the research staff may be found for the library.

SURVEYS

In addition to the ordinary and regular work, the office should be doing more major pieces of research which can not be accomplished by the regular staff. These should be started at least one each year at the present time. After about 10 years of special surveys the number in progress might be reduced and one new survey started every 2 years. At the present time, however, it is important that studies which should have been made some years ago be undertaken now. In addition to the survey of land-grant colleges, the office has undertaken, with the approval of Congress, three nation-wide studies.

The first of these three studies, begun three years ago, is the survey of secondary education. The report has now been completed and is in the hands of the printer. It will be approximately 3,000 pages in length appearing as 28 separate monographs. Too much praise can not be given Dr. L. V. Koos for the faithful attention he has given to this work as associate director.

The survey of teacher education, begun in 1930, under the immediate direction of Dr. E. S. Evenden, will be completed by June 30, 1933. Unfortunately the appropriation for this work was reduced by $20,000, leaving $50,000 instead of $70,000 for the last year's work. This has made necessary the discontinuance of the services of some of the staff members and a curtailment of the amount of material that may be included in the published report.

The survey of school finance was authorized in 1931 at a total cost not to exceed $350,000, and $50,000 was appropriated for the fiscal year 1932. The work was started in 1931 and one year has been devoted to it under the immediate direction of Dr. Paul R. Mort and a board of 17 consultants. A considerable amount of data has been collected and a bibliography of school finance has been compiled and is being printed. Owing to the necessity for retrenchment of governmental expenses, Congress failed to provide funds for the continuance of this study during the fiscal year 1933, and all work on it has been stopped excepting one part which has been financed by an appropriation of $25,000 made by the General Education Board through the American Council on Education. The subject of school finance, considering that expenditures for education in the United States amount to more than $3,000,000,000 annually, is one of the most important subjects now before the American people. For the year 1934 I am asking an appropriation of $75,000 for the continuance of this work. Unless an appropriation is made, much of the work done during the past year will be lost.

HOWARD UNIVERSITY

In accordance with the law, Howard University was officially inspected for the school year ended June 30, 1932. The visiting committee included a number of specialists of the Office of Education who were appointed for this duty by the Commissioner of Education.

In spite of the effects of the depression the enrollments at Howard University have held their own during the past year. The grand total enrollment of students for 1931–32 was 2,464, which is only 9 less than the enrollment for the year 1930–31. But this loss relates only to special and foreign students. The enrollment of regu-

lar students actually shows an increase of eight for continental United States. A slight gain in the enrollments in the academic colleges is shown, while a slight loss is registered for the professional schools.

The total number of graduates for 1931–32 was 361. This is an increase of 36 over the number that graduated in 1930–31. The number of graduates of the several schools is as follows: Liberal arts, 96; education, 131; applied science, 6; music, 3; graduate, 18; theological, 8; law, 18; medicine, 55; dentistry, 17; and pharmacy, 9.

In 1931–32 the university received a total income of $1,719.201.44.

Of the total income, $1,277,380.56 was received from the Federal Government and $441,820.88 from all private and institutional sources. Of the $1,277,380.56 received from the Government, $602,380.56 was for buildings and construction.

The new dormitories for young women, having been completed in the summer of 1931, were occupied by students during the past school year. These well-equipped dormitories have added greatly to the comfort of the students in residence, and at the same time there has been released space in the old buildings which have been remodeled for the use of the deans, the secretary-treasurer, and the comptroller.

On December 31, 1931, the school of law was elected to membership in the Association of American Law Schools. The school now stands on the approved list of all the rating agencies in its professional field. At the April meeting of the board of trustees, Dr. Abraham Flexner, of the Institute of Advanced Study, was elected to the presidency of the board of trustees of Howard University, succeeding Gen. John H. Sherborne, who remains a member of the board.

The sixty-third annual commencement, held on June 10, 1932, was honored by the presence of the President of the United States and Secretary Wilbur, of the Interior Department. President Hoover addressed the graduating classes.

ACTIVITIES OF THE OFFICE DURING THE YEAR 1931-32

Collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems and methods of teaching as shall aid the people of the United States in the establishment and maintenance of efficient school systems and otherwise promote the cause of education throughout the country.

—Organic act of March 2, 1867.

I. RESEARCH AND INVESTIGATION

During the past year the problems investigated by the staff of the office have been of three major types: (1) Those arising out of the present economic situation as it affects education, such as the study of the county unit as a basis for school administration; (2) those which may be termed status or descriptive studies of new and promising movements in education or of conditions for which there are frequent and urgent requests for information, such as the report on State programs of vocational guidance; and (3) those periodic

studies of various phases of education for which this office has long been considered authority, such as the biennial report of statistics of State school systems. Many other examples of these three types appear in the following pages.

PUBLIC SCHOOL ADMINISTRATION

The studies which might be made in this field are innumerable. New problems are continually arising and old ones assume new aspects as conditions change. For example, the unit of administration and support is a problem now occupying the attention of students of school administration and of several of the State departments of public instruction. In the early days of the American public school system the small school district met all the needs. Now many authorities on school administration think that the small school district should be abandoned and legislation enacted to provide for a larger unit.

In order to furnish information regarding the various types of units of administration, a bulletin has been prepared showing the number of administrative units, number of school-board members in each State, and the principal features of each type of unit. The county unit has been especially treated in this bulletin, since most of the inquiries received concerning the unit of administration relate to the county unit.

An important problem facing local school superintendents is the basis of another study which describes the methods used by school superintendents and boards of education in the selection and appointment of teachers. Among the various phases of the subject treated are: Methods used in locating prospective teachers; methods used in collecting information about the applicants; and procedures followed by boards of education in appointing or electing teachers, such as on recommendation of superintendent, or of committees of the board.

Another study contains data showing the status of the elementary school principalship in terms of education, experience, salaries, etc., which will afford superintendents data for comparative purposes.

In the field of school finance numerous questions are asked about practices relating to taxation for school purposes, distribution of the State school funds, and the part the county plays in financing the schools. These are a few of the problems in school finance that need continuous study in order to keep State superintendents of public instruction and others informed regarding movements in financing the schools.

A study of the status of teachers and principals employed in the rural schools of the United States was undertaken because of the peculiar dependence of the educational welfare of rural children upon the character and fitness of those in charge of their schools and because no other organization gathers and publishes information on this important group of public servants. Improvement and progress in the education of rural children comes slowly unless we have sufficient facts upon which educators may build and which enable the public to understand the true situation. This study collected and presented facts concerning training, experience, term of employment, and salary status of five classes of teachers and three

classes of principals working in the rural schools in the various States. Practically 2,000 units of rural school administration are represented, employing a total of 214,269 teachers and 8,275 school principals. The bulletin, which was recently completed and published, presents the data separately for whites and Negroes for each of the 48 States.

EDUCATIONAL LEGISLATION

One of the important responsibilities of the office is to maintain an up-to-date record of legislation affecting education in the various States. Compilations of legislative provisions in various fields of school regulation are issued from time to time, both for their current informational value and for whatever use State superintendents and legislative committees wish to make of them. Three such compilations have been made this past year.

The study of the legal and regulatory provisions affecting secondary education was made as a part of the national survey of secondary education. Among the principal subjects considered in this study are: Units authorized to provide high schools; nature, powers, and duties of local administrative boards for high schools; funds for secondary education; and State administrative and supervisory control of schools.

Because of frequent requests for information regarding free textbooks for public school children, a circular has been prepared which gives the principal provisions of the State laws on the subject. It also contains some data on the cost of textbooks, the principal arguments for and against free textbooks, and a selected bibliography.

Another study reports State legislation relating to kindergartens. The current law relative to the establishment of kindergartens in each State is quoted, and the essential characteristics of adequate legislation are discussed.

CURRICULUM

Since curricula and courses of study in the schools of the country are being continuously revised, the Office of Education is attempting to prepare a series of guidebooks that may be helpful to superintendents and curriculum committees. Such guidebooks are intended to offer in condensed form manuals of procedures in curriculum building. One such is entitled "Safety Education." This bulletin includes discussions of the organization of a curriculum committee, objectives in safety education, classroom materials, and ways and means of administering a school safety program.

Another study, "The Construction of the Curriculum in Science for the Elementary School," outlines methods and materials that will be of assistance to committees preparing courses in elementary school science. Source materials and directions for the construction of curriculum units are presented. As a further aid to curriculum committees and teachers of science, an annotated list of Government publications useful to teachers of science has been compiled.

Helps for schools in teaching citizenship and patriotism were also prepared. One of these, entitled "Childhood Days in Washington's Time," was prepared for and published by the George Washington

Bicentennial Commission. Another, entitled "Helps for Schools in Celebrating the George Washington Bicentennial," contains lists of materials for the use of schools.

STATISTICS OF EDUCATION

The collection of statistics of education on a national scale was specifically mentioned in the act establishing the Office of Education, and the distribution of such information was considered one of the means of aiding "in the establishment and maintenance of efficient school systems" throughout the country. The statistical studies carried on by this office are of three general kinds: (1) Biennial reports of personnel and finances of city schools, of each State, of private schools, of colleges and universities; (2) periodic or recurring studies of certain educational problems made less frequently than every two years; (3) special or occasional studies of some current situation. The labor involved in the preparation of inquiry forms, tabulation of returns, and preparation of final reports is partially shown in the following summary of work during 1931–32:

	Number	Forms tabulated	Pages in report
Biennial studies	6	29,318	803
Periodic studies	6	9,311	160
Special studies	13	25,994	(1)
Total	25	64,623	

[1] Not completed.

A number of improvements in the statistical service have been made this past year:

1. The chapters of the Biennial Survey of Education published this year have been marked by the completeness of the returns made by the schools involved. For example, 300 more schools reported statistics of private high schools and academies than for the previous biennium. Furthermore, statistics of private elementary schools have been collected for the first time. This is important, since in order to present the complete picture of education in the United States it is necessary to record both private and public institutions. Again, all but two of the institutions existing primarily for the training of teachers reported for this biennial survey.

2. Since 1929–30 closed the decade of rapid expansion in school facilities following the war, comparisons are shown by decades since 1870 in the biennial chapters.

3. This year for the first time a section of the biennial statistics has been tabulated by machine. Data from 22,237 public high schools were transferred to cards for the Hollerith tabulating machine, making data available in detail for many classifications.

4. The statistical program has been revised to distribute the load more evenly. Heretofore an almost impossible tabulation load has fallen on the year following the closing of a biennium. A 10-year program of biennial and periodic studies distributes the tabulating and printing more evenly, thus making it possible to report more promptly and permitting more special, timely statistical studies.

The 10-year program of studies, exclusive of special studies, follows:

Year	Statistics of—										
	State schools	City schools	Colleges and universities	Private schools	Public high schools	Rural schools	Schools for handicapped	Private commercial schools	Libraries	Nurse training schools	Special studies [1]
1930–31				[2] x			[4] x			x	
1931–32	x	([3]) ([4])	x								
1932–33		([5])		[6] x				x	x		Technical schools.
1933–34	x	x	x		x	x					
1934–35		([5])					x			x	Music and art schools.
1935–36	x	([5])	x								
1936–37		([5])		x				x	x		
1937–38	x	x	x		x	x					
1938–39		([5])					x			x	
1939–40	x	([5])	x								

[1] Others to be suggested as need dictates and time permits.
[2] Elementary.
[3] Per capita costs.
[4] For this report the complete forms will be sent out, but only certain of the most important data will be tabulated.
[5] Abridged.
[6] Elementary-secondary.

5. As an early step in carrying out the new statistical program, the inquiry forms have been thoroughly revised and an entirely new set of forms has been developed for institutions of higher education, following as closely as possible the report of the National Committee on Standard Reports for Institutions of Higher Education.

NURSERY EDUCATION

Among the newer movements in education is the organization of nursery schools. In 1920 there were about three such schools in the United States; now there are more than 300. In order to furnish information regarding this field of education which seems to have so much of promise, not only for the education of very young children but for the education of parents in child care, a bulletin has been prepared on nursery schools. It presents a picture of what now characterizes a nursery school program, describes current practices in the organization and operation of nursery schools in public school systems and in connection with colleges, private schools, philanthropically supported institutions, and welfare agencies. There has also been prepared a bibliography on nursery education and a directory of nursery schools in the United States in 1931.

SECONDARY EDUCATION

During the year the most significant accomplishment in the field of secondary education was the completion of the national survey of secondary education, which was brought to a close at the end of the fiscal year. Now that the survey has been completed, members of the staff will continue the study of some of the major problems in secondary education that need further study, making extended use

of the survey findings. The office will also cooperate with educational associations and institutions in arranging and conducting conferences to discuss the findings of the survey.

The educational welfare of children in rural and sparsely settled communities continues to involve special problems in the majority of our States. Although 56 per cent of our total population now lives in cities, nearly half the children of educable age and slightly more than half (50.6 per cent) of the children of elementary school age still live in these low density areas. While the number of children to be educated in these areas is nearly as large as in cities, adults of wage-earning age are fewer. This population situation combined with continuing economic depression has aggravated long-standing problems concerned with financial and administrative problems, such as term length, salaries, extension of secondary facilities to children in backward communities, and the like.

Information gathered through a study of the characteristics of secondary education in rural and other small population centers shows that 45 per cent of the high schools of the United States enroll 50 pupils or fewer and more than 80 per cent have an enrollment not exceeding 100 pupils. These data indicate the importance of the small high school in education in the United States. The study aims to show the outstanding characteristics of these numerous small high schools and to disclose successful practices for their future guidance in reorganization.

SCHOOL HYGIENE, PHYSICAL EDUCATION, AND RECREATION

As a basis for informational and advisory service in these fields, there must be continuous collection of statistical information regarding the health of students, studies of conditions in the school plant affecting the hygiene of the school child, investigations of conditions in school children affecting their own and their fellows' health and school progress, and studies of materials, facilities, and methods of instruction.

The most important study of the year has been that of the relation of physique and physical condition to intelligence and scholarship. During the past 40 years some 200 students have applied the statistical method to various phases of this subject and it has been the purpose of the present investigation to piece all of these separate patches of science together so that they can be viewed as a whole and the general relationship of "mind" and "body" more clearly defined. The various investigations have included on the physical side such items as height, weight, measurements of girth, of lung capacity, and of strength; maturity for age; conditions of eyes, ears, nose, teeth, glands, and limbs; general appraisement of health; acute and chronic illness, etc. On the mental side comparison of such items as those above have been made with school marks, school grade for age, and with intelligence quotients as obtained by the use of the various tests which have appeared.

Through the kindness of Miss Anita J. Turner, director of physical education in the schools for colored children of Washington, a classification of 9,000 pupils posture-wise was made in the elementary schools and of the freshmen of the Miner Normal School. The statistics thus obtained confirm the conclusions reached from pre-

vious studies by this office that the carriage of the body is as much an hereditary trait as our facial features, and that it can not be essentially modified by any ordinary means.

Widespread interest and practical development in the field of physical education in its relationship to education are reflected in other research studies made during the past year.

1. An extensive investigation of 895 institutions of higher education includes a summary of the present practices of educational institutions regarding health education and physical education as required subjects in all general teacher-training curricula.

2. A study of athletic coaches in junior and senior high schools presents detailed information regarding 92 junior high school coaches employed in 30 States and 682 senior high school coaches employed in 46 States, showing the extent of their training and the amount of teaching they do.

3. So widespread is the interest in educational camps that a series of reports in this field is under way, including a directory of the various types of camps for children of different ages, showing their educational provisions; a bibliography designed particularly for directors of camps; and accounts of the successful administration of educational camps.

GUIDANCE AND INDUSTRIAL EDUCATION

Guidance and industrial education occupy a prominent place in educational thought at the present time. Guidance is now quite generally accepted, in theory at least, as a function of public school education. Also, some form of industrial education is now commonly included in the work of the public schools. In both guidance and industrial education there are many problems that need further study. Investigations and service materials are needed by those engaged in this field.

Continuing studies in these fields include those of industrial training programs in industrial plants, the organization and programs for guidance in public schools and through State departments, courses of study in industrial arts, and vocational-industrial training in public schools.

A study was made of persons 16 and 17 years of age, in the years 1920 and 1930, to determine changes which took place in school attendance during the decade. For that age-grade group data were determined for urban and rural populations by States showing population, school attendance, and the ratio of school attendance to population. The study indicated that if the ratio of school attendance had remained the same in 1930 as it was in 1920 there would have been two-thirds of a million fewer 16 and 17 year old pupils in school in 1930. The results of the study were published in School Life.

On request of the national committee on State guidance programs of the National Vocational Guidance Association, the Office of Education entered upon a cooperative study, with that committee, of the guidance activities of State departments of education. The study also includes suggestions as to methods of organizing State guidance services.

The need for lists of books and other reading materials suitable for inclusion in industrial school libraries constitutes a pressing problem. In an effort to help in supplying material to meet this need a list of about three hundred references was compiled and classified according to trade-related and industrial subjects, inventions, construction projects, occupations, etc.

"Why children fail" is a problem of great social and financial importance. After consultation with a number of research workers in city school systems, a case study form was developed to investigate pupil failure with special reference to the relation of environmental conditions, individual interests, and personality traits of pupils to their school success. The case study form includes detailed questions on the results of educational tests, health and physical development, school history, traits of personality, home and environmental situations, and other factors considered relevant.

EDUCATIONAL MEASUREMENT

In recognition of the growing demand for research and service in the field of educational tests and measurements, the office has this year added to its staff a specialist in this field. Much of this first year has been spent in building up reference files of measurement materials and in developing working relations with research bureaus and with individuals in testing work in city schools. Several studies have been completed and others are under way.

An intensive study of the techniques of the diagnosis of an individual's strengths and weaknesses through the use of tests is being made. This study is very important at this particular time because of the great increase in the construction and use of tests designed for diagnostic purposes. An important outcome of this study is the standards which are set up for the evaluation of diagnostic tests.

A survey of the best practices in testing work in city school systems is completed. The results of this survey should be valuable to cities desiring to establish testing programs in their school systems. The methods of reporting and recording test results are being studied in this connection. Forms used by various cities will be made available for study by interested school systems. In order to answer the demands for information relative to special testing fields mimeographed lists are being made available.

The use of tests in prognosis is the subject of another study which attempts to show how marks and achievement tests in subjects may be used to supplement intelligence tests in the guidance of pipils.

COLLEGIATE AND PROFESSIONAL EDUCATION

Higher education is just now entering upon a period of applying the scientific method to the solution of its educational problems. Criticism of higher education is widespread to-day. Changes are being made in both methods of teaching and in curricula of colleges to an unprecedented extent. That these changes should be made wisely is the most important interest of higher education to-day. This calls for a program of research.

The study of questions in higher education which arise primarily from the economic depression.—While the movement originated

earlier, the economic depression has hastened the urge to coordinate or consolidate the public institutions of higher education within a given State so as to avoid duplication and competition. To be in position to respond to the States calling upon the Office of Education for assistance, a series of three studies was planned and carried half way to completion: First, the assembling of data which reveal variations among the States in their financing of higher education and in the percentages of their young people who attend college; second, a study of the governing authority and curriculum offerings in institutions of higher education State by State, choosing those States first which maintain separate State universities and land-grant colleges; third, the investigation of the historical development of higher education in a few typical States where the movement for consolidation has made the greatest headway. It is believed that such a study would shed light upon the problems confronting the various States which are contemplating steps in coordination or consolidation.

Two other studies were prompted largely by the economic difficulties of higher education: First, a study of the salaries in land-grant colleges and universities seems to be particularly timely in view of the lack of reliable data as to the variations in salaries paid in different academic divisions and academic ranks; second, a study of 147 small colleges, including accredited and nonaccredited types which have enrollments of 500 students or less, shows the changes in growth and support during the past 10 years. This study will shed light on the financial problems which confront so many small colleges to-day.

Studies that are required by law or administrative necessity and studies that are more or less periodic in character.—Of this type the following may be mentioned:

1. The annual report on land-grant college statistics recording the financial and educational progress of the land-grant colleges, including also the report of expenditures by these institutions. This office is entrusted with the supervision of the expenditures of the Federal funds for the land-grant colleges under the land-grant act of 1862, the Morrill Act of 1890, and the Nelson amendment of 1907. Each year such reports are submitted by the land-grant institutions as are necessary to assure the Office of Education that the above Federal funds are being used as required by law.

2. The annual report of the inspection of Howard University required by Congress showing the status of the educational and financial programs set up.

3. The supplementary section on accredited colleges and universities which brings up to date the list of accredited higher educational institutions in this country.

4. The annual report of current statistics of State universities and colleges which gives significant data showing the enrollments, faculties, and financial resources of State-controlled colleges and universities.

Studies and services which are largely special in their nature.—Of this type the following may be mentioned:

As a part of the contribution of the Office of Education to the celebration of the bicentennial of George Washington's birth, the division has completed a work entitled "The Educational Views of George Washington." A considerable portion of this study shows the deep

interest of Washington in the development of college and university education in this country.

The office cooperated in the study of the Value of Military Education in Universities and Colleges. This was based on the investigation of the views of more than 10,000 graduates of the R. O. T. C. course in 54 universities and colleges.

Because of the increasing demand on the part of the public, several numbers have been added to the series of Guidance Leaflets for those who are planning to enter college. These new leaflets include data on careers in chemistry and chemical engineerig, art, music, veterinary medicine, and home economics.

A study of the aims and objectives of graduate education with particular relation to teaching and research has been completed. This study gives the views of selected groups of college presidents, heads of graduate departments, and graduates with the Ph. D. degree on the theoretical as well as attained objectives of graduate education.

Summer sessions in colleges and universities partake of the nature of adult education as well as that of college education. On this account their activities are very suggestive to college officials. Therefore, a study has been completed of the unusual features of the summer session programs offered by universities and colleges in this country.

In order to further the efficiency of collegiate instruction a study was made of faculty inbreeding in land-grant colleges and universities.

EDUCATION OF EXCEPTIONAL CHILDREN

Education in a democracy involves adequate provision, according to accepted standards, for 100 per cent of the children. It is generally recognized that, conventionally, school systems, especially in their early stages of progress, are organized with a view to the educational welfare of that high percentage of the total which constitutes the normal majority. As the democratic idea in education grows, both from the point of view of numbers to be served and quality of education adapted to achieve the desired objectives, differentiated and increased facilities become equally imperative.

The Office of Education offers research, advisory, and informational services to those schools attempting to provide educational facilities for children who deviate from the normal. These deviations may arise from environmental limitations, from racial differences, or because individuals concerned are physically, mentally, or socially different from the average.

Because of the relative newness of the field of special education in State and city school systems, there is a wide demand for practical service to teachers and parents of children who, because they are different, need special educational consideration. During the year we have planned publications to emphasize this type of service. The first of this particular series is a bulletin on parents' problems with exceptional children designed primarily for the use of parents and parents' study groups. A similar bulletin on teaching problems with exceptional children, somewhat more extensive in scope and designed to give practical help to teachers with their most press-

ing problems, is in preparation. Another bulletin of assistance to teachers seeking further preparation in this special field, Opportunities for the Preparation of Teachers of Exceptional Children, has just come from the press. Further extension of this program of practical service includes completion of bulletins now in progress presenting curriculum construction and teaching units suitable for mentally retarded children and for gifted children. These will give teachers concrete help in organizing instructional material in their classes.

In the field of behavior problems one of the greatest needs is to provide some service whereby the incipient behavior difficulties of children may be detected, diagnosed, and checked. An experimental study has been made of a clinical program carried on in a typical city and of the results accruing from it. This will be published for its suggestive value to other communities in the organization of child guidance work.

Similarly, in connection with the education of physically handicapped children, more research is necessary to enable us better to understand the physical care, education, vocational training, and social needs of each group. Special studies of the education of the deaf and hard-of-hearing and of the blind and partially seeing children in public schools are now well under way. These studies, following those primarily designed for teachers and parents indicated above, should extend our service to superintendents and others in charge of schools where classes for these children have not yet been established. They should familiarize administrators and others with the seriousness of the problems involved and make available scientific knowledge concerning such children and successful practices followed in their education.

Considerable attention has been given during the year to the promotion of a more widespread recognition of the special needs of exceptional children and to the dissemination of information concerning their care in States and communities where it has not yet received sufficient consideration.

EDUCATION OF NEGROES

Service to the education of the Negro population, which includes nearly 4,000,000 educables, has been carried on this year through three major research projects:

They are as follows:

(1) A survey of secondary education for Negroes designed to gather and interpret information not hitherto available, which will show the availability, status, and trends in secondary education for Negroes throughout the United States. The survey is expected to serve as a guide to school officials and administrators in inaugurating or changing policies or practices in this field of education.

(2) A study of elementary rural education among Negro schools working under the direction of the Jeanes supervising teachers. It is the purpose of this study to present rather detailed facts concerning important phases of elementary education for Negroes in rural communities in a representative number of counties in the Southern States where Jeanes supervising teachers are employed. It will offer

data which will facilitate comparisons among supervised and unsupervised rural elementary schools and will help to reveal successful practices as well as imperative needs among Negro elementary schools.

(3) A survey of 2,000 Negro college students through a personnel study of their social, cultural, scholastic, and intellectual background factors. This is the first extensive personnel study which has been made of Negro students on a national scale. It will furnish significant information concerning the outstanding strengths and weaknesses in different types of elementary and high schools.

Another study of interest in this field is the section of the national survey of the education of teachers concerned with the education of Negro teachers. The study, still in progress, is expected to do for Negro education what the national survey as a whole aims to do for teacher education throughout the United States.

EDUCATION OF SPECIAL GROUPS

There are approximately 15,000,000 people constituting the native and minority groups in continental United States and its outlying parts, living in widely dispersed areas, for whose social and economic rehabilitation the people of the United States have assumed large responsibilities. Education is conceded to be the chief instrument through which rehabilitation can and should be achieved. There has as yet been relatively little research carried on by students of education directed toward a solution of the numerous problems involved in educating masses of primitive and semiprimitive peoples. Information concerning education and educational conditions and progress has not been widely disseminated and is not readily available. So far as information is available, the Office of Education offers the only organized service in this important field of education.

During the year a personal investigation of education facilities provided for the natives of Alaska made during the last month of the preceding year was followed at the beginning of this year by a similar study concerned with the education of indigenous peoples in Mexico. Through the courtesy of the Federal education officials of that country a member of the staff visited schools in 9 of the 28 States, observing at first hand the extensive nation-wide experiment under way in applying the principles underlying progressive education as practiced in the United States to the Mexican situation. As a result of the visit a bulletin describing the experiment, a 3-reel moving picture, and a set of slides showing schools in action were prepared for the information of educators in the United States.

Of the publications planned and in preparation designed eventually to furnish information on major problems in this field of education as a whole and to give reasonably complete information concerning educational conditions and progress in each of our outlying parts, five bulletins or pamphlets have been completed and are either published or awaiting early publication. Two others are well under way. Among the former is an extensive study of the intelligence, social traits, and environment of the natives of Alaska. This study is the result of two years' field work in Alaska and is expected to offer a scientific basis for such reorganization of the educational program as may eventually prove desirable. Articles have been written

and an extensive bibliography on the education of indigenous and native groups throughout the world as well as under our own flag is available in the office.

To secure information about the educational provisions available and needed, a social and economic survey of the Southern Appalachian Mountains is now nearing completion. It was made in cooperation with the United States Department of Agriculture and officials of six Southern States. It involves 205 counties lying along the ridge of the Southern Appalachians and will gather all available facts concerning the educational welfare of children living in the southern mountain districts. When completed the study should offer a basis for more intelligent understanding of educational conditions in the backward communities involved.

In many communities the education of foreign-speaking children introduces difficult and specialized problems. A study has been made this year of the education of Spanish-speaking children in certain Southwestern States. Five States (Arizona, California, Colorado, New Mexico, and Texas), in each of which a high percentage of Mexican children are being educated in the public schools, are included in this study. In general, in the States affected there is considerable concentration of Mexican population in certain counties and cities, and these have been selected for special study. For example, 78 per cent of the Mexican population in Arizona is found in 6 counties; 84 per cent of that in California is in 12 counties. Among the factors of special importance are language difficulties; the mobility of Mexican families and consequent irregularity in attendance and short school life of the pupils involved; questions concerning school organization; segregation in lower grades; and other policies. This study should throw light on the problem of bilingual education elsewhere.

SCHOOL-BUILDING PROBLEMS

The purpose of the office in its work on school buildings is to assist States and cities in solving their school-building problems by (1) making school-building surveys at the request of State and city educational authorities; (2) conducting research on fundamental school-building problems which are common to all communities.

For example, the study just completed is on a subject which has hitherto been little developed and yet which is basic to efficient planning of school buildings in any section of the country, i. e., the Functional Planning of Elementary School Buildings. The study was made of 74 elementary school buildings in 40 States. It shows how the function of the school, that is, its educational program, conditions not only the general design of the building but every detail of the construction—number, kind, and size of rooms, equipment, provision for play space, auditorium activities, community activities, etc. Furthermore, it shows that the educational program in elementary schools is no longer a rigid, unchangeable formula, but, on the contrary, is changing dynamically to meet the needs of children in a changing civilization. These changes in the schools' aims and program are in turn reflected in the whole science and art of school building.

But this study is important not only because of the technical data on the planning of school buildings which have been collected; the method of conducting it is equally important. This was referred to in last year's report, but emphasis is placed on it again this year because it has now been carried on long enough to show that it is a real contribution to the problem of conducting cooperative research. The idea behind the method is, that if research on such a subject as school building is to be sound and if practical results are to follow from it, then it should be carried on in close cooperation with the leading experts on school-building problems from all parts of the country—experts in both the educational planning and the architectural planning of school buildings.

Therefore, at the request of the State superintendents of instruction, a national advisory council on school-building problems was appointed, which now has a total of 77 members and 75 advisory architects, a total of 152 on the national advisory council. This advisory council has worked with a member of the staff of this office on the initial plan of the survey and on its evaluation, through regional councils in which every item in the study was examined.

This method of carrying on the work through a central office but planning it and interpreting it by means of decentralized groups all at work on a common task has resulted, before the report is ready to be sent out, in a widespread interest in and understanding of the study.

II. STIMULATION AND COORDINATION OF RESEARCH IN EDUCATION

The ideal of critical, objective, scientific study of educational problems as a basis for administrative action is widely accepted by schools of to-day, and records of investigations evidence considerable progress toward that ideal. About 4,000 reports of educational research were received by the Office of Education in 1930–31. Our records show that the number of bureaus of research in city school systems has increased very rapidly since 1925. The Office of Education attempts to stimulate research along worth-while lines and to assist in coordinating the work of these many research agencies interested in similar problems.

RESEARCH MATERIALS

Bibliographies.—Since 1927 the office has published annual bibliographies of investigations of educational problems, combining reports from State, city, and university research bureaus, as well as from many other agencies and individuals. That it serves an important use is indicated by the hearty cooperation offered this past year by more than 300 reporters, by the increasing calls for the reports, and by many letters of commendation.

Thesis collection.—Some of the most extensive and valuable research in educational problems is carried on in the graduate schools of our universities. This past year, with the indorsement of deans of schools of education, the office invited graduate schools, schools of education, and graduate students in education to join with the office in making a collection of graduate theses in education available for

reference both in the library of the Office of Education and through interlibrary loan. The reply to the invitation was exceedingly generous. About 400 theses were received for deposit in the library before July 1. Pamphlet No. 26 lists the theses received before December, 1931. Requests for loans from all parts of the country are received in increasing numbers, indicating widespread use of this service.

Survey data.—Each national survey collects and reports a vast amount of material, but in the original records for each report are the necessary data for many other tabulations and studies of specific problems, such as segregation of a single State's report from national totals. The past year data from the surveys have been furnished to State teachers associations, State departments of education, universities and colleges, national professional organizations, and graduate students.

Research in higher education.—The professional schools have engaged in recent years in studies of their curricula and organizations on a nation-wide basis. Relatively little use of objective measurements has been made, although important changes have been introduced in these professional schools as a result of these surveys. Colleges of liberal arts seem to be more insistent upon objective evidence as a basis for the changes which educational reformers are advocating.

One of the most significant services which the Office of Education can render higher education is to stimulate as far as possible both the extent of this research in the field of higher education and the demand for a careful scientific procedure in it. Accordingly, the office has entered upon a program of stimulating this research. This program involves three steps:

First, the assembling of a list of educational research projects in progress in the colleges, and distributing the list in multigraphed form to all those actively engaged in research. In carrying out this step, the cooperation of one or more individuals in each State has been sought through whose good offices a list of projects under way in the institutions in the State might be assembled. Wherever possible, a committee on research in the college association of the State was used or was brought into existence in order that the machinery for fostering research in that State might be as permanent as possible. With the aid of these cooperating persons, a list of 487 such projects was compiled and distributed during the spring of 1932.

Second, cooperating with certain universities in calling regional conferences of those who are most actively engaged in research in the field of higher education. The first regional conference was held in cooperation with the University of Oregon in April, 1931. Similar conferences were held during the spring of 1932 at the University of Pittsburgh and at the University of Kentucky. Several others are planned for the fall of 1932.

Third, the publication of the outstanding research studies in a series of bulletins. The report of the Oregon conference incorporating the important papers read has been published as a bulletin of the Office of Education entitled "Research in Higher Education." Other bulletins are in preparation.

HISTORIES OF EDUCATION

Following a report that only 8 of the 62 extant State histories of education are reliable and up-to-date and that 9 States have no published account whatever of the development of their school systems, the office is cooperating with a committee on State histories of the National Society of College Teachers of Education and with the National Committee on Research in Secondary Education in stimulating the preparation of readable, authoritative records of educational developments in the several States and of educational movements of national significance. Two manuscripts have been approved by the committee on State histories and accepted for publication by this office. They are the History of the Municipal University in the United States and the American Lyceum. The committees report that progress has been made this past year on 15 State histories, and that one manuscript is now completed.

HOME-MAKING EDUCATION

Rapidly changing economic and social conditions and their effect upon the home have put new and stupendous responsibilities upon education. This has been felt both in the demand that education for home making be made available to all students, both men and women, and that the curriculum be expanded to include more than heretofore of sociology, economics, science, and child development. With the hope of being of service to schools interested in improving their home-economics programs the office has continued its series of conferences, holding one on May 2–3, 1932, at Amherst, Mass., and another on May 16 in Minneapolis, Minn. The first one, held in cooperation with the six New England State commissioners of education and the Massachusetts State College, featured the Place of Home Making in a Program of Education. The second conference aimed to present a comprehensive picture of home-making education as it obtains in our public schools, colleges, and adult education agencies, and was held in conjunction with the National Congress of Parents and Teachers with 10 national, State, and local organizations assisting.

In addition to the conferences the office has tried to further the cause of home-making education by stimulating needed research in the field. Last year's report described some of the studies carried on cooperatively by this office and committees appointed by the commissioner following the home-making conferences. This year has seen the completion of four of the studies:

1. Criteria for evaluating various administrative aspects of home economics. Ohio committee, directed by Adelaide Laura Van Duzer, supervisor of home economics in Cleveland.

2. An evaluation of home economics by 246 Ohio high-school girls. Ohio committee, directed by Dr. Velma Phillips, director of household administration, Ohio University, Athens.

3. Home-economics content on the high-school level. West North Central States committee, directed by Mrs. Lucile Rust, professor of home-making education of the Kansas State College of Agriculture and Applied Science, Manhattan.

4. The organization of the home-economics content for high schools. West North Central States committee, directed by Genevieve Fisher, dean of the division of home economics of the Iowa State College of Agriculture and Mechanic Arts, Ames, Iowa.

Materials distributed by the office to be of practical aid to those engaged in home-economics education include a list of Government publications useful to teachers in this field, a bibliography on the home-economics curriculum, and a number of reference lists on special subjects.

III. EDUCATIONAL SERVICE

In a sense the entire program of the Office of Education is a service program. The problems for investigation are selected with an eye to their practical use to schools generally. In a similar way the other activities of staff members are designed to be of service to schools and the cause of education throughout the country. Illustrations of service rendered in specific fields during the past year are as follows:

GROUPS SERVED AND TYPES OF EDUCATIONAL SERVICE FOR THE YEAR 1931–32

State departments of education:
- Assistance in reorganizing accounting systems.
- Comparative statistics of State school systems.
- Surveys of State school systems.
- Reports of educational legislation.
- Drafting State school laws.
- Conferences of State superintendents.
- Speakers for State meetings.
- State conferences for county superintendents.

Local school administrators:
- School surveys.
- Comparative statistics of local school systems.
- Consultative service on school administration.
- Reports of work of county superintendents.
- Series of helps in making courses of study.
- Consultative service on school buildings and equipment.
- Compilations of school laws on particular subjects.

Administrators in colleges and universities:
- Comparative statistics of higher education.
- Consultative service in consolidation of higher education facilities.
- Reports on universities abroad.
- Evaluation of foreign student credentials.
- Surveys.
- Summer school conferences.
- Conferences on research in higher education problems.

Research workers:
- Directory of research agencies.
- Annual bibliographies of research.
- Loan service of research reports and other publications.
- Comparative statistics of education.
- Evaluation of studies.
- Files of studies in progress.
- Loan service of research materials (as national survey data).

Teachers:
- Reports of Government publications of help in classrooms.
- Reading lists of new books in special fields.
- Reports of classroom projects.

Teachers—Continued.
- Aid at teachers' institutes.
- Programs and lists of courses of study.
- Studies of status and salaries.
- Classroom materials (such as health charts).
- Exhibit books (as of report cards).
- Directories of school officials.

Parents:
- Lists of materials for study groups.
- Studies of child life.
- Selected readings for home study.
- Speakers at meetings.
- Directory of summer courses for parents.
- Locating schools of special types (as for blind).

Students:
- Direction in selecting subjects and writing theses.
- Guidance in choice of vocation.
- Locating schools of special types (as for radio training).

Laymen:
- Information on school taxes.
- School building reports.
- Information service on school law.
- Directories of different types of schools.
- Comparative statistics of education.
- Addresses.

Journals and newspapers (hence, the general public):
- News releases on educational events.
- Brief reports of investigations.
- Information service.
- Reports of Government activities for education.

State teachers associations:
- Speakers for meetings.
- Suggestions for programs.

In addition, publications serve all of the above groups, and library reference and loan service are available to them.

SCHOOL SURVEYS

The office regularly receives many more requests for assistance in making school surveys than its limited staff permits it to grant. In the field of school buildings alone, during the past 12 years the office has made surveys in 20 cities in 14 States. Seventeen of the 20 cities adopted the recommendations of the office for school building programs, and in 12 cases bond issues resulted from the surveys. In every case the building programs recommended by the surveys resulted in greater economies and greater value for the money invested than had been contemplated before the surveys. For example, in the case of seven cities in which the results were checked with particular care, the savings effected by the surveys amounted to more than $15,000,000.

During the early spring of 1931 the board of education and the chamber of commerce of Youngstown, Ohio, invited the Office of Education to make a survey of the public schools of that city. A joint committee presented a series of questions upon which it was desired that the survey should focus. These questions involved the organization of the school board, the administration of the schools, financing and housing the schools, and instruction. The field work was done during the months of September, October, and November, 1931, by members of the staff and invited specialists. The report on the survey was completed in December and presented to the Youngstown Chamber of Commerce, by whom it was printed.

The office has cooperated with States engaged in the various steps of consolidation. Members of the staff served as counsel for the Commission on Consolidation of the State Institutions of Higher Education in North Carolina, and for the Commission on Consolidation of Higher Educational Institutions in South Carolina, assisted in the survey of higher education in the State of Mississippi, and was represented on the advisory committee of the State Commission of Virginia for the Establishment of a State College for Women as a part of the University of Virginia. It is the policy of the office, however, to serve primarily as counsel for the various State commissions rather than to engage in the active field work necessary for these State surveys. For example, in North Carolina, in this capacity, our consultant helped map out the procedures which the commission might best use, assisted in the selection of the survey staff and sat with the commission through its several meetings. After the survey staff formulated its report the consultant examined the report before it was submitted to the consolidation commission. and finally, when the consolidation commission presented its report to the newly created board of trustees of the combined University of North Carolina, assisted in the interpretation of the report to the board of trustees. The above procedure illustrates the way in which the office hopes to serve the several States which request assistance in surveys of higher education.

Another member of the staff was invited to evaluate the program of the Georgetown, Del., demonstration school in the light of observations made two years ago when the school was opened and to discover whether the school can render greater service to the State than it is now rendering. The school, organized to demonstrate an enriched type of program in a rural school district and to offer observation facilities for teachers in other schools, is a unique State project.

LIBRARY SERVICE

The office is in a very real sense built around the library, dependent upon its collection of more than 150,000 volumes and the efficiency of its organization in maintaining prompt and valuable information service and carrying on its investigations. Through the generosity of publishers, the Library of Congress, and individual donors, the office's small purchase fund of $1,800 for books and periodicals was supplemented this year to the extent of accessioning approximately 12,000 publications. Although the staff is entirely too small to provide general reference library service to the public, an average of 200 persons from outside the office ask for service at the loan desk each month and 150 others ask for documents through outside and interlibrary loan.

The principal activities of the library during the past year are of three types:

1. *Building adequate book collections in specific fields.*—A check list of college catalogues has been begun and will progress with greater rapidity during the coming year. These catalogues are much used and an accurate and complete check list will greatly facilitate the process. We are trying to complete the files and bind the catalogues as rapidly as possible. The entire collection of for-

eign periodicals, catalogued and uncatalogued, has been brought together. As rapidly as possible, the cataloguing of this collection will be completed so that it may be more readily available for use.

An especial effort has been made to collect courses of study issued by States and cities. To facilitate their use the current courses have been placed in pamphlet boxes and shelved together in the catalogue room. They have been extensively used both by specialists in the office and by readers from the outside.

Limitations of space and shelving regulations have heretofore prevented the assembling of all those documents which make up our foreign education collection. During the past year all catalogued and uncatalogued materials, foreign periodicals, foreign university catalogues, and official education reports have been brought together, so that for the first time the library division of materials on education in other countries is in presentable and readily usable forms.

2. *Bibliographic service.*—The bibliographic work of the office has increased greatly in the past year. Certain periodic bibliographies such as the annual Bibliography of Research Studies in Education and the quarterly Record of Current Educational Publications have continued. The first issue of the annual Bibliography of Religious Education has been completed. Others issued during the year are The Education of the Negro, The Education of Teachers, Education and Psychology of Exceptional Children, Vocational Guidance, Supervisors of Instruction in Rural Schools, Education of Women, Nursery Education, Education by Radio, Home Economics Curriculum. Besides these published bibliographies, many others have been prepared in special fields on request.

3. *School library service.*—One important function of the library is service to elementary and secondary school and college libraries, including advisory service on progressive practices and equipment, as well as investigations of library problems and their interpretation in practical form. Under a grant-in-aid from the Carnegie Corporation a study was made this year of rural school library services and practices. Altogether 318 rural schools and 50 county libraries in 36 States were visited and personal interviews were held with staff members of State educational and library agencies. School library activities in State teachers associations was the subject of another and briefer study.

FOREIGN EDUCATION PROBLEMS

The service activities of the office in the field of foreign school systems are chiefly in three categories: (1) Gathering, interpreting, classifying, and keeping in order data about education in foreign countries; (2) using that material to aid any persons to whom such information may be valuable; and (3) helping to interpret to foreigners education in the United States. The balance between incoming and outgoing data is not well maintained; the office receives more than its staff is able to use and send out promptly.

Gathering and keeping in order data about education in other countries.—The sources of information are requested and voluntary reports from the diplomatic and consular offices of the State Department; official publications of all kinds such as laws, decrees,

arrêtes, and bulletins issued by school authorities abroad; and non-official periodicals, books, brochures, etc., on education in other countries.

Through the Department of State the division asks about many institutions and receives excellent reports. In February, 1931, the Department of State asked the Department of the Interior for a statement of the kind of information it desires from other countries. In its part of the reply this office told its needs rather fully. Mainly because of that request for direction and the answer, the voluntary reports through the State Department are now more valuable. Illustrations are:

Great Britain: Intelligence experiment in Scottish schools.
Palestine: Education in Palestine.
Quebec: Synopsis of the educational system in the Province of Quebec.
Colombia: Reorganization of the ministry of education.
Chosen: Education in Chosen.
Mexico: Cost of public education.
Spain: Outline of Spanish primary and secondary school systems.

The office is indebted to the diplomatic offices in Washington, of Bulgaria, Cuba, Czechoslovakia, Egypt, France, Germany, Hungary, Irish Free State, Japan, Norway, Rumania, Sweden, and Turkey for assistance in obtaining data and making translations. Much help has come to it also from the Library of Congress, the Departments of Commerce and Labor, and the Pan American Union.

The 100 or more foreign education periodicals and the many official reports and bulletins that come to the office as well as the new books that were acquired by it are read regularly for important items.

Informing the people of the United States about education in other countries.—The office does not intend to serve any special groups of people in the United States but to aid any citizens either at their request or on its own initiative. Neither does it purpose to make its work essentially practical and applied as distinguished from pure investigation and general culture. But in the process of developing its activities, chiefly two groups, (a) college and university registrars and committees of admission and (b) departments of comparative education, have called on it for aid and by so doing have become its main clientage.

The aid called for by the first of these groups is severely practical in its nature and requires information that can be applied immediately to specific needs. This is the evaluation of credentials of persons who have received all or part of their training in other countries and who, for some reason or other, usually because they wish to continue their studies in the United States, need to know on what levels their studies abroad place them in American terms.

During the year the office handled 819 requests for credential evaluation with documents from 70 different political divisions. This was an increase of 229 cases over the previous year.

The division has undertaken another and extended service mainly for college and university registrars which should be valuable also for the general field of higher education in the United States. In May of 1931 the American Association of Collegiate Registrars sent to the Secretary of the Interior a request that the "Office of Education prepare an annual report on the proper accrediting of educa-

tional institutions in foreign countries for the guidance of registrars in American colleges and universities." In his reply of June 12, 1931, the Secretary stated, in effect, that the Office of Education could not undertake to make for institutions in other countries a classification so refined as that set up by the collegiate registrars for colleges and universities in the United States; that it could try to secure from education officials abroad their lists of higher institutions and transmit those lists with brief statements of the requirements for admission to and graduation from each institution; and that in principle he thought it the function of the Office of Education to furnish the data by which officials in the United States can do their own rating, rather than for the office to do it.

In September of 1931 the office began arranging to work with the committee in carrying out the project. A manuscript on institutions of higher education in Sweden has been written, sent to the committee for its approval, and, having been approved, is now in the Government Printing Office. A second study, Institutions of Higher Education in Norway, is in preparation, and Office of Education Circular No. 38, Information About the Certificates Issued by the Scottish Education Department, was mailed to about 250 colleges.

More than a hundred requests for aid were received from students of comparative education. Most of the requests were couched in the general terms of asking for data on "education in" one or another country. Inquiries were received from about 23 countries. Those inquiries that were more specific in their nature and indicated a better understanding of the amount and kind of work involved in making the studies included many separate investigations.

The office saw to completion Bulletin No. 5, 1932, Education in Belgium, and Pamphlet No. 29, Official Certificates, Diplomas, and Degrees Granted in France, as well as a variety of articles concerning education in other countries to be published in periodicals.

Helping to interpret to foreigners education in the United States.— Naturally the office neither expects nor wishes to receive from other countries such courtesies as those told of in this report without making a substantial return in the way of publications, data, and other things pertaining to education in the United States. The work connected with keeping up our part of the exchange was materially heavier this year than during any previous equal period. Briefly we replied to a group of doctors and surgeons from Czechoslovakia who were willing to come to the United States to lecture if a similar group would go from this country to that for a like purpose; collected for and forwarded to the National School Museum of Belgium at Brussels examples of educational measurement materials; arranged a collection of publications and graphs for the Institut für Völkerpadagogik at Mainz, Germany; asked the State departments of education in the United States to furnish copies of their State school laws to the International Bureau of Education at Geneva, Switzerland.

Visitors from Australia, Austria, Bulgaria, China, Chosen, England, Germany, Persia, Rumania, and South Africa were aided in various ways and several groups of foreign students were shown the office.

CONFERENCES

The Office of Education is committed to a program of research as its chief means of promoting the cause of education. Since investigation of problems, local and general, as well as desirable activities of other sorts, may often be stimulated through conferences, several have been held during the past year at the request of and in active cooperation with various local sponsoring organizations. Besides the two conferences in home-making education and the one in higher education, which are reported in another connection, two others were held. In cooperation with the State department of education of Alabama, the sixth of a series of regional supervisory conferences in the Southern States called by the Commissioner of Education was held in Montgomery, Ala. This was attended by representatives from the group of States indicated for the discussion of progressive educational practices in rural school systems.

At the invitation of the American Peace Society, the Office of Education arranged the program, conducted the meetings, and made the report of the Commission on Education of the American Conference on Institutions for the Establishment of International Justice, held at Washington, May 2 to 5, 1932.

ADULT EDUCATION PROBLEMS

During the past year the education of adults both through schools and through informal agencies has assumed new importance because of the large number of unemployed adults who sought more training or retraining for specific economic use. With the cooperation of the President's organization on unemployment relief, the Office of Education collected information as to what educational opportunities for the unemployed are offered by public school systems in this country. Reports were received from a large number of cities, and a summary of these reports was published in mimeographed form by the President's organization.

In further cooperation with the organization mentioned above, suggestions were made to deans of summer sessions in colleges and universities that they hold conferences during the summer of 1932 on the subject of what schools can do to prevent an undue loss of morale on the part of the unemployed, inviting to these conferences officials of schools and business organizations. Suggested programs were prepared for such conferences.

Cooperation was continued with the United States Department of Justice in devising an educational program for Federal prisons and correctional institutions. Visits were made to California State Prison, at San Quentin, Calif.; Oregon State Prison, at Salem, Oreg.; Maine State Prison, at Thomaston, Me.; and suggestions given in regard to the education of the prisoners.

EDUCATION IN THE HOME

The service of the Office of Education to education in the home was instituted in view of the well-recognized fact that the education of children is a 24-hour task for which the home and the school are

jointly responsible. Parents in increasing numbers ask for help in understanding their children and in dealing with problems of child training. Every year hundreds of parents apply to the Office of Education for assistance of one kind or another. In addition to individual parents who have demanded service, educational institutions, leaders of parents' groups, study and reading groups, and leaders in national, State, and local parent-teacher associations have called upon this office for various kinds of help. Service has been rendered during the past year as follows:

Locating and interpreting available scientific information regarding the physical and mental development of children, behavior problems, problems of family relationships, etc.—Circular No. 54, 1932, contains a list of publications of the Government useful for study or discussion groups, or for program material for parent-teacher associations. More than 45 colleges, universities, or State teachers colleges included in their 1932 summer sessions either courses or conferences, or both, in this field; Circular No. 45, 1932, contains descriptions of typical opportunities offered in 1931 summer sessions. Another circular distributed widely this year shows where parents and leaders in parent education may find authoritative material on the organization and methods of parents' study groups, problems of parents, the play of children in the home, and courses for reading or study on parents' problems. Reading courses for parents of preschool, elementary school, and high-school children have been issued and distributed. A new course entitled "This Changing World" was issued this year, dealing with social and economic conditions to-day and their effect upon the home and family.

Stimulating the development of parent education through conferences and meetings.—This office took an active part in 12 States and the District of Columbia during the past year in the development of parent education programs. Information regarding methods, content of courses, current practices, problems, and extent of programs was obtained in some of these States; in others, the interest of parents in furthering their own education was stimulated and State and local institutions and organizations were encouraged to sponsor projects looking toward the development of state-wide programs in parent education in State departments of education or in colleges and universities.

A study is now under way of the parent education movement in State departments of education and in public schools, in which variations in organization will be pointed out.

COMMERCIAL EDUCATION

In order to be of help to school administrators, teachers, and curriculum workers in this rapidly developing field, the office provides a variety of service files, exhibits, and circulars in important aspects of commercial education. The past year has seen the completion of the following aids:

1. A bibliography on junior business education. This aims to provide a summary of the progress, problems, and trends of commercial education on the junior high school level. The report shows a change in the objectives and content from an emphasis on special-

ized job training for drop-outs to a new emphasis on general economic and business information that should be the heritage of all eighth and ninth grade pupils.

2. A report of tests for commercial education. Information is given on 76 commercially available tests in this field.

3. Guidance materials in business subjects. Several short circulars are being prepared on collegiate courses and curricula in accounting, advertising, banking, commercial teacher-training, foreign trade, insurance, marketing, real estate, secretarial training, and other subject-matter fields, to assist school administrators in the guidance of students interested in education for business.

EDUCATION BY RADIO

The Office of Education is called upon to answer a constant stream of inquiries on the vital subject of radio, which touches so many phases of life. From the remote regions and from the cosmopolitan areas, from amateurs, from professors, from students, from advertisers, from editors, from those who serve and those who are being served, from reformers and from those who need reforming, questions pour into the Office of Education. The radio has captivated the imagination of the entire civilized world. It is stimulating a new revival of learning.

In answer to these inquiries, the Office of Education has sought to assist all who asked for aid in the field of education by radio. The office has gone farther than this. It has attempted to keep the educational and governmental interests of the country posted and alive to the importance of this new educational device.

In response to the requests of various educational and broadcasting groups who are interested in extending and improving their educational broadcasting service, the Office of Education has been assisting in setting up and evaluating broadcast programs of educational material. The office has also initiated and assisted with certain research needed to make better use of radio as an educational agency.

Good References on Education by Radio.—A leaflet intended to make the reader acquainted with the principal sources of information on the subject.

Suitable Radio-Sound Equipment for Schools.—A manuscript prepared in cooperation with the Radio Manufacturers' Association to assist school officials in securing and utilizing suitable equipment.

How to Broadcast—The Art of Teaching by Radio.—A manuscript designed to assist educators in mastering the technique of broadcasting.

Education in the German Broadcasting System.—A study now in progress designed to make available information regarding Germany's use of radio for educational purposes.

In addition to these studies, the Office of Education is cooperating with the National Advisory Council on Radio in Education in making a survey of national voluntary organizations' use of radio, and with the National Committee on Education by Radio and the United States Department of Agriculture in making a survey of radio activities in land-grant colleges and independent State universities.

SERVICE TO VARIOUS GROUPS

Members of the staff have worked on committees in the study of a number of problems of national scope. Organizations with which staff members have cooperated include the National Probation Association, the National Council of Teachers of English, the National Vocational Guidance Association, the National Congress of Parents and Teachers, the American Association of University Women, the President's Conference on Home Planning and Home Ownership, the Yearbook Commission of the Department of Superintendence, the International Society for Crippled Children, National Association of Commercial Teacher-Training Institutions, National Advisory Council on Radio in Education, National Committee on Education by Radio, American Library Association, the National Congress of Colored Parents and Teachers, the National Association of Teachers in Colored Schools.

Professional assistance was given to many groups. For more than a year the Office of Education has been cooperating with the State Department of Public Instruction of Pennsylvania in making a comprehensive study of education in that State undertaken for the purpose of planning a 10-year program. The United States Commissioner of Education is a member of the commission in general charge of the study; the Chief of the Division of American School Systems has been acting as associate director, and several specialists of the office have acted in an advisory capacity to some of the committees. The State superintendent in a report entitled "Pennsylvania Studies Itself" says that the collaboration of the United States Office of Education "will be of inestimable value in the prosecution and evaluation of the various studies."

The General Federation of Women's Clubs Education Committee was assisted in the development of a study pamphlet on preschool and kindergarten education. Advice was given members of State Departments of Education of Michigan, Pennsylvania, and Virginia regarding courses of study and programs, to the school health service division of the Metropolitan Life Insurance Co., the National Tuberculosis Association, and the summer round-up committee of the National Congress of Parents and Teachers.

For a number of years this office has worked closely with the National Committee on Standard Reports for Institutions of Higher Education. This year, at the request of the State superintendent of public schools of Missouri, members of the staff worked several weeks in setting up a new system of records and accounts.

IV. INFORMATION SERVICE

The information service of the Office of Education is a conduit; it connects demand with supply. Demand, in this case, consists of requests for help from thousands of teachers, superintendents, parents, professors, associations, etc. They want authoritative facts to help them in solving difficult problems in the preparing of children, and also adults, to live successfully in modern America. They want adequate facts based on the experience of the entire

United States. Supply, in this case, consists of the facts gathered by the investigators of this office.

A number of channels are used: Correspondence, office publications, exhibits, writings and addresses, and visual education materials.

Correspondence.—Incoming mail during the past year totaled approximately 250,000 pieces, 150,000 of the number being first-class mail, most of which required individual answers. This is an increase of 50 per cent over that of five years ago. During the peak month of October, when the school year is well under way, incoming letter mail totaled 15,000.

Publications.—The office issued 114 publications distributed as follows: Forty-one bulletins, 11 pamphlets, 16 leaflets, 6 bibliographies, 23 miscellaneous, including handbooks, price lists, directories, etc., and 17 circulars. More than 455,000 free copies were distributed to libraries, to individuals who supplied data, and to persons particularly interested in the specific fields of the studies.

Serious attention has been given to improving the appearance of office publications, with the aim of increasing their use. The cooperation of four leading art schools and of the layout division of the Government Printing Office has brought about improvements in illustration, typography, and paper which has brought general commendation and increased sales. There has been phenomenal increase in School Life circulation. In June, 1931, the free distribution of School Life was 5,000, the subscriptions at the Government Printing Office, 4,794. In June, 1932, the free distribution was 1,500, the subscriptions, 9,817. This is the largest subscription list ever enjoyed by School Life at its present subscription rate and one of the largest distributions by fee enjoyed by any United States Government periodical information service. The annual income to the Government in subscriptions is now equal to the expenditure for composition and printing plus 1,500 copies for free distribution by the Office of Education.

School Life has aided materially in carrying important United States Government information to the schools. Promotion of the work of the George Washington Bicentennial Commission, the White House conference on child health and protection, the President's organization on unemployment relief, the President's conference on home building and home ownership, and the Samuel F. B. Morse centennial celebration in honor of the invention of the telegraph, and the publications and services of other Federal agencies important to education, has been carried on through its pages.

Exhibits.—The office has prepared informational exhibits of its work and of educational activities for a variety of occasions. The meeting of the department of superintendence of the National Education Association brought more than 10,000 leaders in education to Washington in February. An exhibit of Government services useful to schools was established in the lower corridor of the Interior Department. Fifteen Federal bureaus and the Office of Education displayed publications, maps, and other services to thousands of school officials. Exhibits of Office of Education publications and services were prepared for 15 other educational associations holding conventions.

Writings and addresses.—This office by no means depends entirely upon Government publications as an outlet for the findings of its staff. Reports which have immediate news interest, those which are of interest to special groups, those which summarize the results of long, technical accounts are often published in newspapers and periodicals. Following is a partial list of the periodicals which have carried Office of Education contributions the past year:

American Shorthand Teacher.
Ball State Commerce Journal.
Broadcasting.
Broadcasting News Bulletin.
Bulletin of American Library Association.
Bulletin of the Pan American Union.
Child Welfare Magazine.
Current History.
Educational Method.
Elementary School Principals' Yearbook.
Grade Teacher.
Junior College Journal.
Journal of Engineering Education.
Journal of Education.
Journal of Educational Research.
Journal of Higher Education.
Journal of Home Economics.
Michigan State Journal.
Mid-Pacific Magazine.
Nation's Schools.
Normal Instructor.
North Central Association Quarterly.
Pathfinder.
Practical Home Economics.
Proceedings of American Home Economics Association.
Proceedings of the Association of Collegiate Registrars.
Proceedings of the N.E.A.
Proceedings of Pennsylvania Schoolmen's Week.
Progressive Education.
Rural America.
School Board Journal.
School and Society.
Southern Workman.
State Bulletins of Congress of Parents and Teachers.
The Bulletin (N.A.T.C.S.).
United States Daily.

As another means of reporting the findings of investigations, members of the staff accept invitations to address professional groups. A total of 288 addresses has been reported during the past year before National, State, regional, and local groups.

VISUAL EDUCATION MATERIALS

Sources of materials of value in the field of visual education have been listed and circulated widely in response to inquiries. Our circular No. 46, Motion Pictures in the Public Elementary and Secondary Schools, reports curriculum and extracurriculum uses of motion pictures and other items of significance to school administrators. Fifteen hundred copies have been distributed.

We have distributed during the year a total of 500 copies of the following lists: Commercial and Government sources of educational motion pictures, slides, maps, and pictures, and sources of lending collections; lists of manufacturers of still and motion picture projection equipment suitable for educational purposes; a bibliography on sound pictures in education; lists of associations and of magazines in the visual field; lists of universities and colleges distributing various visual aids; and a bibliography on the effect of motion pictures on the educational and social tendencies of children. Inquiries requiring special attention and requests for our lists averaged about two a day.

A limited number of slides and motion picture films are available on request. Exhibit books of school materials have had widespread use.

LIST OF PUBLICATIONS FOR THE YEAR ENDING JUNE 30, 1932

BULLETINS, 1931

No. 12. Research in higher education.
No. 15. Scholarships and fellowships.
No. 16. Record of current educational publications, April–June.
No. 17. Bibliography on the education of the Negro.
No. 18. Certain State programs for improvement of rural school instruction.
No. 19. Circular letters as a supervisory agency.
No. 20. Volume I (bound) Biennial Survey of Education, 1928–30.
No. 20. Chapter 2, Elementary education.
No. 20. Chapter 3, Secondary education.
No. 20. Chapter 4, Industrial education.
No. 20. Chapter 5, Commercial education.
No. 20. Chapter 6, Home-making education.
No. 20. Chapter 18, Radio and education.
No. 20. Chapter 20, National surveys of the Office of Education.
No. 20. Chapter 22, Recent progress and conditions of museums.
No. 20. Volume II, Chapter 1, Statistical summary of education.
No. 20. Chapter 2, Statistics of State school systems.
No. 20. Chapter 3, Statistics of city school systems.
No. 20. Chap. 4, Statistics of universities, colleges and professional schools.
No. 20. Chapter 5, Statistics of teachers colleges and normal schools.
No. 20. Chapter 6, Statistics of public high schools.
No. 20. Chapter 7, Statistics of private high schools and academies.
No. 21. Opportunities for the preparation of teachers of exceptional children.
No. 22. Record of current educational publications, July–September, 1931.

BULLETINS, 1932

No. 1. Educational directory (complete).
Part I, Elementary and secondary school systems.
Part II, Institutions of higher education.
Part III, Educational associations, boards and foundations, etc.
No. 2. History of the municipal university in the United States.
No. 3. Status of teachers and principals in rural schools of the United States.
No. 4. Record of current educational publications, October–December, 1931.
No. 5. Education in Belgium.
No. 6. The county superintendent in the United States.
No. 7. The legal status of the county superintendent.
No. 8. Safety education: Helps for schools in constructing a course of study.
No. 10. Physical education and health education as a part of all teacher-training curricula.
No. 12. The American Lyceum.
No. 13. Record of current educational publications, January–March, 1932.
No. 14. Parents' problems with exceptional children.
No. 16. Bibliography of research in education.
No. 18. Selected bibliography on the education of teachers.

PAMPHLETS

No. 20. Status of the junior college instructor.
No. 22. Speech defects and their correction.
No. 23. Bibliography on education and psychology of exceptional children.
No. 24. Salaries in land-grant universities and colleges.
No. 25. Helps for schools in celebrating the George Washington Bicentennial.
No. 26. Recent theses in education.
No. 27. Summer educational opportunities.
No. 28. Study of the educational value of military instruction in colleges and universities.
No. 29. Official certificates, diplomas, and degrees granted in France.
No. 30. State legislation relating to kindergartens in effect, 1931.
No. 31. Faculty inbreeding in land-grant colleges and universities.

LEAFLETS

No. 7. Dentistry.
No. 8. Journalism.
No. 9. Librarianship.
No. 10. Architecture.
No. 11. Civil engineering.
No. 12. Electrical engineering.
No. 13. Mechanical engineering.
No. 14. Pharmacy.
No. 15. Nursing.
No. 16. Forestry.
No. 17. Music.
No. 18. Veterinary medicine.
No. 19. Chemistry and chemical engineering.
No. 20. Art.
No. 41. Report cards for kindergarten and elementary grades.
No. 42. Education in the Virgin Islands.

GOOD REFERENCES

No. 2. Vocational guidance.
No. 3. Supervision of instruction in rural schools.
No. 4. Education of women.
No. 5. Nursery education.
No. 6. Education by radio.
No. 7. The home economics curriculum.

MIMEOGRAPHED CIRCULARS

No. 39. An indexed list of city school reports, 1929–30.
No. 40. Expenditures in publicly controlled junior colleges, 1928.
No. 41. School library activities in State teachers associations for 1930.
No. 42. List of educational research studies in city school systems.
No. 43. Negro schools and American education week.
No. 44. List of educational research studies of State departments of education and State education associations, 1930–31.
No. 45. Summer session opportunities for parent education.
No. 46. Motion pictures in the elementary and secondary schools.
No. 47. A directory of nursery schools in the United States.
No. 48. United States Government publications useful to teachers of science.
No. 50. United States Government publications useful to teachers of home economics.
No. 51. Thirty-four United States Government publications useful in health education.
No. 52. Selected list of tests and ratings for social adaptation.
No. 54. United States Government publications of interest to parents and leaders in parent education.
No. 55. Athletic coaches in junior and senior high schools.
No. 56. Tests in commercial education—An annotated list.
No. 57. Camping and education.

MISCELLANEOUS

Supplement to 1930, No. 24, Accredited secondary schools.
Offprint No. 1, Bibliography of research studies in the training and professional status of teachers (1931, No. 13).
Letterheads, duplex and penalty labels, blanks, listing sheets.
Reprints, School Life order blanks and letters.
Revision of title of career leaflets, etc., holding type, wall calendars, Congressional Record, etc.

NEEDS

Some of the needs of the Office of Education are immediate and urgent. Of these, two may be mentioned:

1. Provision should be made that no important phase of educational investigation be discontinued. The salary appropriation for the present year does not do this.

2. Provision is needed for the publication of the results of the investigations carried on by the office. Indications are that more than 50 reports will not be cared for with present printing funds.

Other needs of the office are those which are anticipated if the program is to develop normally for continued service. The following are of this type:

1. Newly developing fields of education call for additions to the staff. A specialist in oriental education and one in education of native peoples should be added, and both the editorial division and the library need help badly.

2. Conditions which brought about the demand for a study of school financing are still with us, as are the demands from the field. The survey of school finance should be continued as an emergency measure.

3. Federal recognition of the problems involved in educating handicapped children is widely urged, and Federal aid to schools for their education has been sought. A survey of the status of education of the handicapped and a study of the need for Federal support should be made as soon as possible.

4. An outlet should be provided in the form of a periodical for the quantities of very valuable material on education in foreign countries, much of which is supplied through the Department of State. The Office of Education appears to be the agency to make this material available to schools.

Respectfully submitted.

BESS GOODYKOONTZ,
Acting Commissioner.

The SECRETARY OF THE INTERIOR.

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