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REPORT

OF THE

COMMISSIONER OF EDUCATION

FOR

THE YEAR ENDED JUNE 30, 1913

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VOLUME I

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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.

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.,
July 8, 1911, to date.

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REPORT OF THE COMMISSIONER OF EDUCATION.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
Washington, April 29, 1914.

SIR: An examination of the two volumes of the Report of the Commissioner of Education for the year ended June 30, 1913, shows that they constitute a fairly complete yearbook of the progress of education for that year in the United States and a record of the most important events connected with the progress of education in other culture countries. None of the statistics in the second volume of the report are as complete or accurate as they should be, and the statistics for State school systems are still one year late. I fear both defects must continue to mar these reports till more adequate funds for collecting statistics are available. I do not know of any other agency that attempts with so little money to collect, compile, digest, and interpret so large and varied a mass of statistics from so wide a territory. For the year 1913 these statistics cover 57 States, Territories, and possessions of the United States, approximately 1,200 cities, 14,000 high schools, 900 kindergarten systems, and 1,000 private kindergartens, 1,150 colleges, universities, and professional schools, 300 normal schools, 675 industrial schools, 350 schools for negroes (mostly secondary schools), 600 commercial schools, 270 schools for abnormal children—deaf, dumb, blind, feeble-minded, criminal, etc.—675 summer schools, 1,000 museums, 15,000 libraries, and several thousand educational associations and societies. The report covers the facts of school attendance for more than 25 millions of children and the expenditure of approximately three-quarters of a billion dollars. Because of the importance of the information contained in these statistics, for which there is no other source, it is very desirable that the bureau should be enabled to make its statistical reports complete, accurate, and up to date.

In no previous report, I believe, has so wide a range of topics been discussed as in the 43 chapters of the first volume of this report. The list includes many phases of elementary, secondary, and higher education, the educational work of the Army and the Navy in the Military Academy at West Point and the Naval Academy at Annapolis and elsewhere, vocational and professional education, the kindergarten, schools for defective children, the educational activities of

the Catholic, Jewish, Lutheran, and Mormon churches, the Young Men's Christian Association, the educational work of libraries and museums, and a summary of educational activities in Canada, the Latin-American States, Great Britain and Ireland, Sweden, Norway, Denmark, the Netherlands, Belgium, France, Switzerland, Germany, Austria-Hungary, Spain, Portugal, Italy, Turkey, Russia, Japan, Siam, China, India, Australia and New Zealand; in the French colonies and the Italian and German possessions in Africa; also in Liberia, Egypt, and South Africa. The commissioner is under obligation, not only to members of the bureau staff, but also to many men not connected with the bureau, for their generous assistance in preparing these chapters. In many instances the work has been done for only nominal remuneration. Some important chapters that should appear in the report have been omitted because there has been no one in the bureau with sufficient knowledge of the subjects to prepare them, and there has been no fund with which to employ others to do it.

When the defects here mentioned can be remedied, the Annual Report of the Commissioner of Education will deserve the reputation which it already has, that of being the world's best yearbook in education.

INTERPRETATION OF SOME STATISTICS.

For the year ended June 30, 1912, the estimated number of children of school age (5 to 18) was 25,167,445, an increase of 421,883, or 1.7 per cent over the previous year. The number of pupils of all ages enrolled in the public schools was 18,182,937, which was 72 per cent of the total estimated number of children of school age, and eighty-two one-hundredths of 1 per cent more than were enrolled the year before. The average daily attendance in the public schools was 13,302,303, an increase of 430,323, or 3.34 per cent over the year ended June 30, 1911. The average daily attendance was only 52.7 per cent of the total number of children of school age in the country, and 73.2 per cent of the total enrollment in the public schools. The total enrollment in the public, private, and parochial schools was approximately 78 per cent of the school population, and the total average daily attendance in schools of all kinds was only 57 per cent of the total school population. This shows that the average number of days of schooling for the children of school age for that year was only 90. An average of 90 days in school and 275 days out of school for the entire school population gives a dangerously small amount of schooling for the future citizens of our democratic Republic and the democratic States and smaller communities of which it is composed. At this rate the total average schooling for each child, to prepare it for life and for making a living, for society and the duties of citizenship,

is only 1,170 days, a number still far short of the minimum average of 1,620 days with which we should be content, as set forth in the commissioner's report for last year.

The number of teachers in the public schools within the year increased from 533,606 to 547,289, a gain of 2.56 per cent. For each teacher employed in the public schools, 33 children were enrolled and 24 were in average daily attendance. The proportion of children to teachers is not now too large. Except as the school population may increase, we do not need to add to the number of teachers in the schools so much as we need to increase their efficiency and, by the consolidation of small schools and the division of the overcrowded rooms and classes in large schools, to bring about a better distribution of teachers and pupils. The proportion of male to female teachers was slightly larger than for the year before. It is to be hoped that this marks the beginning of a new tendency. Many of the most valuable features of our American public schools are due to the fact that they have been able to obtain the services of women of good native ability and fine culture. For most of the work required in the elementary schools and a large part of that of the high schools women are better fitted than men, and a large per cent of the teachers in these schools should be women. But there is good reason for the feeling which has been growing for some years that the proportion of men in the schools has become too small.

The increase of 6,358 buildings used as schoolhouses does not indicate much progress in school consolidation, either in country or city. The per cent of increase in schoolhouses is nearly twice as large as the per cent of increase in enrollment. That the new schoolhouses are better than the old, and that the people are willing to pay for better school equipment, is shown by the increase of more than $44,500,000 in the value of public school property. The percentage of increase in the value of public school property was 3.66. Although the year for which this report is made was marked by much unfriendly criticism of the public schools, the people showed the permanence of their faith in these schools by contributing to their support more liberally than in any previous year. The expenditure for the public schools within the year reached the grand total of $482,886,793, which was 8 per cent more than for the year before. The per capita expenditure for the total population was $5.07; for the total school population, $9.19; for the total enrollment, $26.56; and for the total average attendance for the average school year of 158 days, $36.30. The average school term of 158 days is the highest yet reported.

The statistics for high schools, colleges, and professional and technical schools are for the fiscal year ended June 30, 1913. Within this year the number of public and private high schools increased 2.9 per cent, and the number of high-school students increased 4.45 per cent. The

total number of high schools reported to the bureau was 13,445, the number of high-school teachers reported was 27,092, and the number of high-school students was 1,283,009. It is to be regretted that there is no separate report of the expenditures for high-school purposes. Expenditures for public high schools for the year 1911–12 are included in the total expenditures for public schools for that year. The larger increase in high-school teachers as compared with the increase of schools and students shows a commendable effort to supply teachers qualified to teach the different subjects of the high-school curriculum and to reduce the size of high-school classes. The average number of students for each high-school teacher was only a small fraction more than 19.

The 596 colleges and universities reporting in 1912 and again in 1913 show an increased attendance of 2.35 per cent of college students in graduate and undergraduate courses, and a decrease of 11 per cent in the number of preparatory students. The fact that the per cent of increase in the number of high-school students was two and six-tenths times as large as the per cent of increase in the school population, and the per cent of increase in the number of college students 40 per cent larger than the increase in the school population, shows a satisfactory response to the ever-increasing need for a larger number of men and women with better preparation for the duties of society and State than can be had in the elementary schools. The large decrease in the number of students in the preparatory schools and classes of colleges indicates a rapid increase in the efficiency of the high schools. The time should soon come when it will be no longer necessary for any college to maintain preparatory classes. Not only is it much better for the colleges that they use all their means for legitimate college work, it is also better for the high schools and the communities which they serve that they be not weakened by having their students withdrawn before they have finished their high-school work. It is also true in most instances that the high-school work can be done better and at less cost in the regular high schools than in the preparatory classes of colleges. Probably the large decrease in the number of students in the preparatory classes of colleges is due to some extent also to the more liberal practice of the colleges in accepting for admission work in subjects other than those heretofore required.

The continued decrease in the number of professional schools—theology, law, medicine, dentistry, pharmacy, and veterinary medicine—and in the number of students in these schools is evidence of the continuation of the efforts to raise the standards of the schools and of their requirements for admission. The decrease was greatest in schools of medicine, in which the year shows a net loss of 7 schools

and of 1,214 students, 6 per cent of the total number of schools and 7.6 per cent of the total number of students.

The large increase of 18 per cent in the number of summer schools, 26 per cent in the number of summer-school teachers, and 27.5 per cent in the number of summer-school students, may be due in part to more complete returns. It is, however, due still more to the growing popularity of these schools, which afford teachers, college students, and others opportunity to devote to study time which would otherwise be lost. Not all summer-school work is of college grade, but much of it is, and most of it is done with an eagerness and earnestness of purpose and a maturity of mind which much of the college work of the regular sessions does not show. The total number of summer-school students reported was 181,288, only 11 per cent less than the total number of college students reported. A large proportion of these summer-school students, probably three-fourths of them, are teachers in elementary and secondary schools. The fact that more than one-fourth of all the teachers in these schools attend the summer schools reporting to this bureau as such, while a much larger number attend the county and city institutes for one or more weeks each summer, is evidence both of their desire to prepare themselves to do better work and of the popular demand for greater efficiency in teaching.

The reports show an increase of 8 in the number of public normal schools, a decrease of 1 in the private normal schools, and an increase of 4,471 in the total number of students enrolled in normal schools of both classes. The fact that the increase in the number of normal-school students is less than one-third of the increase in the number of public-school teachers shows how little progress we are making toward the ideal of a teacher with professional preparation for every schoolroom. The intensity of the feeling of the need for teachers with some professional preparation is shown by the fact that 931 public high schools and 265 private high schools report training courses for teachers, with a total of 27,050 students enrolled in these courses. This is an increase of 93 public high schools and a decrease of 2 private high schools, as compared with the year before, and a total increase of 3,920 students enrolled for this work. These high-school teacher-training courses are intended almost wholly to prepare teachers for the rural schools. Most of the graduates of the normal schools still go to the city and town schools. The fact that country-school teachers are given less preparation (many of them have none except the education of the elementary schools) would seem to indicate that teachers in rural schools need less maturity, knowledge, and professional training than teachers in city schools. Just the reverse is true, however, and it is to be hoped this may soon be generally understood. When it is understood, schools of the very best

type and in sufficient quantity will be established and maintained for the purpose of preparing teachers for all country schools.

THE WORK OF THE BUREAU.

The annual statement of the commissioner to the Secretary of the Interior for the fiscal year ended June 30, 1913, shows a large increase in the work of the bureau. The number of publications issued was larger than for any other year since the bureau was established. Besides the two volumes of the commissioner's report and the annual statement to the Secretary, these publications included 44 bulletins, 3 circulars, and a medical handbook for the Alaska school service. Many of these bulletins were published in the full number permitted by law, and for most of them the immediate demand was greater than the supply. Besides the printed bulletins the bureau issued 200 or more multigraph circular letters of from one to six pages in length. These are sent to school officers and teachers and to the press. The average number of copies of these letters was about 5,000. The bulletins and letters covered a wide range of subjects. Letters received from school officers and from teachers of all grades and kinds in all parts of the country indicate that both bulletins and letters were well received and have accomplished much good. The number of copies of the publications of the bureau distributed was nearly double the number distributed the year before, and more than three and one-half times the number for 1910. Nearly four times as many letters were received at the bureau and answered in this year as in the year 1910. The commissioner and the specialists in higher education, school administration, rural schools, school sanitation and hygiene, and negro education visited many more schools and attended many more meetings of teachers and school officers than had ever been possible before. This opportunity of personal contact with schools, teachers, officers, and citizens has enabled the bureau to acquire a large amount of accurate first-hand knowledge of educational conditions and needs and to give the kind of help that can not be given in any other way.

The specialist in school hygiene and sanitation and his assistants gave direct help in regard to the construction of schoolhouses to school officers in 19 States, from New York to California and from Michigan to Florida and Texas, saving to the communities represented by these officials hundreds of thousands of dollars and giving to the communities better school buildings than they would have had without this help. The demand for the loan of six collapsible cardboard models of three different types of rural schoolhouses has been far greater than could be supplied. This demand comes from school officers, boards of health, lumbermen, builders, normal schools, departments of education in colleges and universities, and conventions

of teachers and school officers. There is great need for an extension of this service.

In addition to the studies which the bureau made of schools and colleges in the United States and its possessions, a member of the Division of School Administration made a careful first-hand study of the schools of certain Cantons and cities of Switzerland, the chief purpose of the study being to discover the means by which the schools adapt their organization and work to the local conditions and needs of the communities which they serve. Three members of the Rural School Division have spent some time in Denmark studying the rural schools of that country and making a special investigation into the so-called folk high schools. A temporary appointee to the position of specialist in higher education went to the British Isles to undertake a careful study of the newer tendencies in the universities of England, Scotland, and Ireland. The results of these studies have been, or will be, published as bulletins of the bureau and will, I believe, prove to be very valuable to those who are working to improve our schools and to all students of education.

Within the year three new divisions were established in the bureau, the Divisions of Negro Education, Kindergarten Education, and Home Education.

Besides a general preliminary survey of schools for negroes in the Southern States, the Division of Negro Education made a careful study of high schools, private and industrial schools for negroes in Alabama, and is extending this study to all the States of this section.

The Division of Kindergarten Education, with the help of the National Kindergarten Association and the International Kindergarten Union, made an inquiry into the status of kindergartens and kindergarten work in the United States, the results of which have been published in a bulletin of the bureau, and began a careful study in detail of many special phases of kindergarten work. Through this division an exhaustive study will be made of the whole problem of the education of very young children in schools and institutions of different kinds.

The Division of Home Education was established near the end of the year. Through this division the bureau is undertaking to assist parents in the education of their children in the home before they enter school and after they quit school, and to bring about a closer and more intelligent cooperation between home and school.

Within the year the Division of Rural Education was enlarged by the addition of two specialists and a chief of field service, and by the promotion of an assistant in the division to the position of specialist in rural education. For the first time in its history the bureau has been able to begin a general investigation into the condition and needs

of the rural and village schools of the country and to make suggestions and offer assistance toward their improvement.

The specialist in the Division of School Administration has made a study of the schools of towns and cities of not more than 25,000 population. The conditions under which the schools of towns and cities of this class are conducted make it possible to adopt improvements more readily than can be done in larger cities.

The list of special collaborators serving the bureau at a nominal salary was increased during the year from 42 to 65. These collaborators are men and women of special ability and interest, working under such conditions as enable them to give valuable service to the bureau without interfering with their duties. Some of them bring to the bureau the helpful cooperation of important committees and commissions, thus enabling it to extend its work in a way otherwise impossible except at the cost of large expenditures for specialists. Some of these special collaborators have desks in the bureau and give valuable assistance in carrying on its correspondence, making investigations, preparing reports, and otherwise. Many other men and women, not officially connected with the bureau, have cooperated generously and ably with the commissioner and specialists in the bureau. It is evident that when the bureau can have a sufficient force of able specialists in its employ it can have the hearty assistance of large numbers of the ablest men and women in various departments of education throughout the country, thus enabling it to increase largely the volume and value of its work.

For the purpose of extending information in regard to the best which has been done in drawing in the public elementary and secondary schools of the country, Dr. Henry Turner Bailey and Mr. Royal Bailey Farnum, at my request, prepared for the bureau a select exhibit of drawings done in elementary and secondary schools of the United States. This exhibit, consisting of 96 large mounts, showing drawings of all kinds in various grades up to the last grade of the high school and so arranged as to show progress from grade to grade, is sent by the bureau to cities and meetings of educational associations upon request and the payment of transportation. The bureau has prepared several sets of lantern slides, with accompanying materials for lectures, on rural schools of this country and the schools of Denmark and Switzerland. These slides with their lecture texts are sent on request for use in teachers' meetings, meetings of citizens, and elsewhere.

A very large part of the work which it should do, and for which it was created, the bureau has not been able to undertake for lack of funds. The need for some of this work is very great, and it is hoped that it may soon be possible to begin it.

SOME TENDENCIES.

In my report for the fiscal year 1912 I spoke of the current criticism of the public schools, much of which was constructive and helpful, but some of which was neither intelligent nor sympathetic. Most of this criticism has given way to careful studies made to see just what the schools are doing and what changes are needed to enable them to do their work better and adapt themselves to the needs of the people and the times they serve. Detailed surveys have been made of several cities and States and of counties in other States. The reports of some of these surveys are illuminating and helpful. In some instances, notably in the State of Ohio, the surveys have led to wise and helpful legislation. The practice of having such surveys made is likely to increase. Any community may well want to know just what it is getting for its expenditures for schools, whether the time of its children in school is used to the best advantage, and what changes in organization and conduct of the schools are necessary to secure the best results. A survey made by intelligent educators and business men offers the best means of obtaining this information. Possibly a word of caution against the professional surveyor will not be out of place. It is easy to cause adverse criticisms to be made against the schools of a city or State, arouse discontent and suspicion among patrons and taxpayers, suggest the need of a survey and the advantages to be derived from it, and then offer, for a consideration, the services of an individual or group of individuals to make the survey. Probably there is no more difficult task in all the field of educational effort than that of making an intelligent and constructive educational survey of a city, county, or State. Officials wanting such surveys made should use all diligence and care in obtaining the help of disinterested men and women. Like most other things in the field of education, this work had better not be done at all than not done well.

It is pleasing to note the increased interest shown by individuals and communities in several parts of the country in the teaching of adult illiterates to read and write, and to enable those of meager education to extend their knowledge of things pertaining to their duties as citizens, as members of society, and as participants in the industrial and economic life of the country. The success of the effort to eliminate illiteracy in Rowan County, Ky., has given other communities courage, as has also the success of experiments in teaching illiterate immigrants in the factory schools in New York City and elsewhere, and of experiments made by the employees of the Young Men's Christian Association. If there were some central agency through which this movement could be encouraged and directed, it would, I believe, soon extend to all cities and States in which there is

any large number of adult illiterates, and within a few years most of the five and a half million adult illiterates would have learned at least to read and write, and millions of men and women of meager education would have extended their knowledge. This bureau is the proper agency for the promotion of this work, if funds can be had for it.

In my report for 1912 I called attention to the excessively short terms of the rural schools in several States. It is gratifying to be able to state that some of the States having the shortest school term have taken steps to increase their length. The suggestion for a school term of not less than 180 days has met with general approval and the campaign for the attainment of this ideal has begun.

SOME SUGGESTIONS FOR THE IMPROVEMENT OF SCHOOLS AND SCHOOL SYSTEMS.

Investigations made by this bureau indicate quite clearly several additions and changes needed for the improvement of our schools and school systems. Among these are the following:

I. *More kindergartens.*—In all cities, towns, and villages, and especially in all manufacturing communities, kindergartens and other schools for the right education of children under the ordinary school age should be established and maintained. In the country where children come in close contact with nature and take part in the simple industrial and social activities of the home, as also in the homes of intelligent, thoughtful, and well-to-do people who provide suitable occupations for their children, there may be less need of the kindergarten and infant schools of other kinds; but for the children of the poor in the cities where the home environment is bad; for the children of laborers who are left all day alone, fathers, mothers, and older brothers and sisters being away in the mills and shops and mines; for the children of the indulgent rich, overdressed, supplied with an overabundance of toys, and left to the unintelligent care of servants; and for the children of the overcareful, whose parents would shield them from contact with nature and the possibility of contamination from association with other children, and rear them in jealously guarded exclusion, there is great need for the sane, normal exercises and lessons of the kindergarten or Montessori school. In reply to a recent inquiry this bureau obtained information from 6,371 public and 994 private kindergartens, in which 364,189 children were enrolled. In the cities, towns, and manufacturing villages of the country there are no less than 2,000,000 children between the ages of 4 and 6 who should have the care and teaching of the kindergarten. Within the last two years several States have enacted laws permitting the use of public-school funds for the support of kindergartens.

II. *Rearrangement of elementary and high school.*—The 12 years of elementary and high school, now grouped into 8 years of primary and

grammar school and 4 years of high school, should be rearranged into 6 years of elementary school and 6 years of high school. The 6 high-school years should be subdivided into 3 years of junior high school and 3 years of senior high school. I know no valid reason for the present division except the historical one, that the primary school of 3 or 4 years was gradually extended a year at a time to 7, 8, or 9 years before the high school was generally adopted as a part of the public-school system. The following are some of the generally accepted reasons for the suggested change:

1. For most children the beginning of adolescence, marking the transition from childhood to youth, comes at 12 or 13. Most writers on education have recognized this and accepted it in making their plans for a school system. Bishop Comenius suggested 6 years for the school of infancy or the school of the mother's knee, 6 years for the vernacular school, 6 years for the school of languages or the high school, and 6 years for the college, university, and professional schools. Children entering school at 6 and attending regularly complete the work of the first 6 grades at 12 or 13 years of age.

2. In most of our schools children make little real progress in the seventh and eighth grades. There has been much complaint that this is a period of marking time. This is especially true when the subject matter and the methods of the elementary school are carried through these grades, and when all the teachers are women.

3. Taking up the seventh and eighth years as a part of the high school makes it easy to begin departmental teaching in these grades and to adapt the methods of teaching and discipline to the changing demands of the children. It also makes it much easier to begin work in foreign languages, constructive geometry, history, literature, and elementary science where they should begin. We lose much by postponing the study of languages to the later years, when children have grown out of the imitative period of life, in which they can most easily learn to understand, speak, read, and write a new language. This division also makes it possible to introduce vocational education two years earlier than is now the practice, and for many reasons it is very desirable that this should be done.

4. Our high-school work now suffers in comparison with that of the Gymnasium and Realschule of Germany, the lycée of France, and the public school of England, and much of the work of our colleges must therefore be of a very elementary kind. With the rearrangement proposed here, boys and girls at the end of the 12 years of elementary and secondary school might have to their credit a much larger amount of effective work in languages, mathematics, science, and other subfects than they now have. With a little more care in the selection of high-school teachers and the adoption of the plan of promoting the teachers with the children through the elementary grades, as

explained later in this Introduction, one or two full years might be gained.

5. Only about one-fourth of the children now enter the high schools. In most States the compulsory-attendance period corresponds closely to that of the elementary school. Parents and children are thereby confirmed in the belief that the education of the elementary school is all that is needed. The break between the elementary school and the high school, coming at the end of the compulsory-attendance period, suggests quitting school and makes it easy. If the break came at the end of six years of elementary school work, most of the children would at the end of the compulsory-attendance period already have been in high school two years, doing high-school work in the high-school way, under high-school conditions, with high-school teachers, in company with those children who would under present conditions enter and go through the high school, and many more children than now enter the high school at all would remain through the entire high-school period.

6. In the larger cities the adoption of this plan would require more high-school buildings and fewer elementary-school buildings than the present plan. The larger number of high-school buildings would bring the high school closer to a large part of the school population.

7. The division of the six years of high school into two sections of three years each would make a second differentiation and readjustment of work possible and easy.

III. *Advancement of teacher with the class.*—Teachers and pupils should remain together longer, especially in the first years of school life. At present teachers of rural schools come and go, only a small per cent remaining at one place more than one school year, and a much smaller per cent more than two years. They do not remain long enough to learn the ideals, conditions, and needs of the community or to acquire that intimate knowledge of the children which every teacher should have. In most city schools a teacher in any of the first six or eight grades remains in the same grade from year to year while the stream of children flows by her. Under these conditions the teacher may become painfully familiar with the minute details of the course of study as made out for the particular grade, but she never becomes acquainted with the individual children of any group she teaches. At the beginning of the school year in the fall, or at the beginning of the second half year in midwinter, from 40 to 50 children promoted from the next lower grade come into the teacher's room to take the place of a like number who have been sent on to another teacher in the next higher grade. The teacher knows nothing of the children, not even their names. Probably she has never seen any of them before. She knows nothing of their character,

nor of their varying abilities in the different subjects of the course, and has only vague ideas of what they have been taught in the grades below and of what they are expected to learn in the grades above, for which her work is supposed to prepare them. Knowing nothing of the parentage of the children, she can not know what powers, capacities, tendencies, heredities, are to be expected and to be developed or restrained in any individual child. Knowing nothing of their past experiences in the home, in the field, in the shop, on the playground, and in association with kindred and friends, she does not know how to use the results of these vital experiences as the raw material of the lessons to be learned in school. Knowing nothing of their present home life, their occupations and interests, and their relations to their parents, she is unable to bring about that close cooperation between school and home and the unity of school and home interests without which the work of the school can not be made to take hold as it should on the lives of the children. Having very little definite knowledge of the details of the work which the children have done in the lower grades, she is unable to use the knowledge gained in these grades as the basis of the new lessons, to interpret the new in terms of the old, and to dovetail the one into the other in such a way as to make the work of the year an intelligent development and continuation of that of previous years. Having never conducted a class through any of the grades higher than the one in which she teaches, she has little conception of the relation of the work of this grade to the higher grades, and is therefore unable to select out of the mass of facts and principles with which she deals those on which emphasis should be placed as a preparation for future work. With no knowledge of the inner life of the children, of their ideals, hopes, purposes, and dreams of the future, she is unable to make the lessons of the school take hold on these, modifying them and being enriched by them, as must be the case before the school, its lessons, and its disciplines can be made to project themselves into the future and take hold on life as they should, and as they must, before they can become fruitful in life and character and deeds. In all city schools, teachers of the first four or five grades should be promoted from year to year with their classes.

To this plan two objections are frequently raised: (1) That the teacher may be inefficient, and that no group of children should be condemned to the care and instruction of an inefficient teacher through a series of years; (2) that the full influence of the personality of any one teacher has been exhausted by the end of a year, and children should therefore come in contact with a new personality each year. The answer to both objections is easy and evident. The inefficient teacher should be eliminated. The man or woman who is unable to teach a group of children through more than one year

should not be permitted to waste their money, time, and opportunity through a single year. A personality which a child between the ages of 6 and 12 may exhaust in a year must be very shallow. What the child of this age needs is not an ever-changing personality, but a guide along the pathway of knowledge to the high road of life.

IV. *Improvement in the rural school.*—The principle involved in the above can be applied in the country schools only through a longer tenure of office for the country-school teacher. Some means must be found by which the rural schools may get and keep men and women of greater native ability, fuller and better education, more maturity and finer skill. The number of class periods per day for each teacher in the country school must be limited so that each period may be long enough to enable teacher and pupils to work out the lesson. For most lessons this can not be done in the 5 or 10 minutes which can be devoted to each lesson in a school of 25 or 30 children in six or eight grades and only one teacher. The organization and subject matter of the rural school must be better adjusted to the conditions and needs of rural life.

As a means to these ends I suggest that the rural schools be consolidated as much as can be done without too much inconvenience for children or too great a cost for transportation. In a carefully laid out school district of 10 or 12 square miles, with a schoolhouse at or near the center, few children have to travel more than a mile and a half to or from school. Except in the worst winter weather this is not too far even for small children to walk. There is now little or no reason why the country school for young children should be in session when the weather is worst and not in session when the weather is good, and walking through country lanes, across fields, or along forest paths is pleasant and health giving. In most counties in the Eastern, Northern, Southern, and Middle Western States, and in many of the more densely populated counties of the Pacific States, there is now a school for every 5 or 6 square miles, and in many counties a school for every 3 or 4 square miles. The number of schools is larger when the population is more dense and smaller when it is less dense. In many counties one-room, one-teacher schools are scattered along the roads and across the country little more than a mile apart. By making a school district of 10 or 12 square miles (12 square miles means only $3\frac{1}{2}$ miles square), two, three, or four schools, and sometimes as many as five schools, each with one or two teachers at the most, could be brought together into one.

This consolidation would give to each school a larger number of teachers and make it possible to organize the school with principal, special teachers for different subjects, fewer daily lesson periods for each teacher, a better school spirit among both pupils and teachers, more variety in studies, and many other advantages.

When such a consolidation is made a good schoolhouse should be built, attractive, comfortable, and sanitary, with classrooms, laboratories and library, and an assembly hall large enough, not only to seat comfortably all the pupils of the school, but also to serve as a meeting place for the people of the district. For the principal's home a house should be built on the school grounds. This house should not be expensive, but neat and attractive, a model for the community, such a house as any thrifty farmer with good taste might hope to build or have built for himself. And as a part of the equipment of the school there should be a small farm, from 4 to 5 acres if in a village or densely populated community, and from 25 to 50 acres if in the open country. The principal of the school should be required to live in the principal's home, keep it as a model home for the community and cultivate the farm as a model farm, with garden, orchard, poultry yard, dairy, and whatever else should be found on a well-conducted, well-tilled farm in that community. He should put himself into close contact with the agricultural college and agricultural experiment station of his State, the departments of agriculture of State and Nation, farm demonstration agents, and other similar agencies, and it should be made their duty to help him in every way possible. The use of the house and the products of the farm should be given the principal as a part of his salary in addition to the salary now paid in money. After a satisfactory trial of a year or two a contract should be made with the principal for life or good behavior, or at least for a long term of years.

In this way it would be possible to get and keep in the schools men of first-class ability, competent to teach children and to become leaders in their communities. The principal of a country school should know country life. A large part of country life has to do with the cultivation and care of the farm. The best test here as elsewhere is the ability to do. The principal of a country school in a farming community should be able to cultivate and care for a small farm better, or at least as well, as any other man in the community. It may be true that "those who can, do; and those who can't, teach," but it should not be so. It must not be so if the teacher is to do the work and have the influence in the community that he should.

I am assuming that the principal of the consolidated country school will be a man. As a rule, it should be so. In every school attended by large boys there should be at least one man; other teachers may well be women. The increased prosperity and wealth that would come to any community with such a school as would be possible under the plan suggested would soon enable it to pay sufficient salaries to obtain the services of women of the best native ability, education, training, and skill. Of course not many such teachers can be had as long as the salaries paid are less than half the wages of fairly good stenogra-

phers in city offices or the wages of saleswomen in village stores. In many communities the yearly salary of the teacher is now less than the cost of feeding a prisoner in the county jail. Under the plan suggested the principal's wife might in many instances become the leader in the social life of the community and help in making the teacher's home and the school a social center. She might also assist the women teachers in extending the school work to the homes of the district, making the work and the care of the homes more intelligent and tying the women and their homes to the school as the principal would tie the men and their farms.

The plan here suggested would not prove very costly. If bonds were issued to pay the first cost of house and land, by the time the bonds matured the increase in the value of the land would in most communities amount to as much as its first cost and the community would have at a comparatively small cost property of a much greater permanent value.

V. *Redirection of the work of the rural school.*—Courses of study in country schools need reconstruction and their work needs redirection. As human beings and as citizens, men and women living in the country have the same interests in the humanities (the term is used in its broad sense) and the things pertaining to civic life and citizenship that all other people have. But as farmers and farmers' wives, making their living from the soil and living in isolated country homes, their interests differ widely from those of men and women of the laboring and professional classes in the cities. However the case may have been in the past, it has now come about that farmers need a fuller, more extensive, more varied and thorough knowledge, a more comprehensive grasp of fundamental principles, and a greater power of adjustment than men engaged in other professions. The same is true of the farmer's wife as compared with other women. Of the chemistry and physics of the soil, of plant and animal life, of methods of tillage, of the feeding and care of animals, of plant and animal diseases and the means of protection against them, of farm machinery and its care and management, of buying and selling, of bookkeeping and the business side of farm life, of fertilizing and the means of preserving the fertility of the soil, of the breeding of plants and animals, of road making and forestry, of the sanitation of the farm home, of the best use of the food products of the farm, of the care of children in isolated country homes, and of many other things on a knowledge of which the success, prosperity, and happiness of the farmer and his wife depend, our country schools take little account. Their courses of study need to be remade on the basis of what the farmer needs to know, and their teaching must take into consideration the environment and the raw material of experience of the country boy and girl. This bureau is undertaking a careful study

of the farmers' needs, through which study, with the help of members of the Department of Agriculture and teachers interested in the subject, it hopes to work out a new content of subject matter for the rural schools of the country.

VI. *Home gardening for town children.*—There is need of suitable educative, purposeful, productive occupation for millions of school children in our cities, towns, manufacturing villages, and surburban districts who now have no proper employment out of school hours. In the cities, towns, manufacturing villages, and suburban communities of the United States there are approximately 13,000,000 children between the ages of 6 and 20. Of these, about 9,750,000 are enrolled in the public and private schools. The average daily attendance is approximately 6,500,000, two-thirds of the enrollment and one-half of the school population. The average length of school term in the cities is 180 days. The average attendance is 120 days.

Probably 5 per cent of these children are away from home during the summer vacation months with their parents at summer resorts or visiting in the country. Between 5 and 10 per cent are employed in some useful, healthful, productive occupation. Eighty-five per cent remain at home without proper employment for any large part of their time. Most of them have little opportunity for play. Some of them work a portion of the time at occupations at which they earn very little and which are not suited for children of their age. The dangers of idleness and unsuitable occupation are very great for all. A large majority belong to families the members of which must earn their living by their daily labor and whose earnings are so meager that anything which can be added by the children is much needed. Many of them are cold in winter, and must go hungry much of the time. More of them live in small, crowded rooms and in poorly furnished homes. More than two-thirds of them leave school at 14 years of age or earlier, to become breadwinners. Because of lack of proper contact with nature and the experience which comes from suitable, purposeful, productive occupations, most of them do not get from their years in school such education as they should.

Home gardening done by the children under the direction of the schools seems to offer what is needed. In all of the manufacturing villages, surburban communities, and smaller towns, and in the outskirts of the larger towns and cities, there is much valuable land in back yards, vacant lots, and elsewhere which might be used for this purpose. In every school in a community of this kind there should be at least one teacher who knows gardening both theoretically and practically. This teacher, who should, of course, be employed 12 months in the year, should teach the elementary sciences in the schools during school hours and should, out of school hours, direct the home gardening of the children between the ages of 6 or 7 and 14 or 15.

If possible the teacher should have the assistance of an expert gardener, so that the work may be done in the most practical and profitable way. The teacher and the gardener should help the children find the plots of ground near their homes best suited for garden work, aid them by some cooperative method in having the lots properly plowed and prepared for cultivation, help them select seeds, and show them how to plant, cultivate, and harvest, so as to obtain the best results. The teacher should spend the afternoons and Saturdays of winter, spring, and fall, when school is in session, and all of the vacation days of summer, if there are summer vacations, visiting the children in their homes, directing their work, and giving to each child such help as it most needs. Once a week or oftener, during the vacation months, the teacher should assemble the children in groups for a discussion of their work and of the principles and methods involved.

Vegetables, berries, and fruits grown should be used first as food for the children and their families; then the surplus should be marketed to the best advantage. Through the help of the teacher this can be done in a cooperative way. Ten or 15 cents' worth of vegetables each day from the gardens of 200 children would amount to $20 or $30. In summer and fall, when the surplus is large and can not be marketed to advantage, the teacher should direct and help the children in canning and preserving for winter home use or for sale. The canning and tomato clubs of the Southern States have already shown what can be done in this way.

It is difficult to estimate all the results of this plan once it is in full operation throughout the country. For the children it will mean health, strength, joy in work, habits of industry, an understanding of the value of money as measured in terms of labor, and such knowledge of the phenomena and forces of nature as must be had for an understanding of most of their school lessons. They will also learn something at least of the fundamental principle of morality, that every man and woman must make his or her own living; must, by some kind of labor of head, hand, or heart, contribute to the common wealth as much as he or she takes from it; must pay in some kind of coin for what he or she gets.

The economic and sociological results are also worthy of consideration. Experiments already made show that with proper direction an average child of the ages contemplated can produce on an eighth of an acre of land from $50 to $100 worth of vegetables. A third of the children in the city schools of the United States might easily produce $300,000,000 a year.

This plan in full operation would offer a valuable supplement to the child-labor laws. A proper substitute for hurtful child labor is only less desirable than its prohibition. A boy 10 or 12 years old, with a small plot of land, working under careful direction, can pro-

duce more for the support of the family than could be purchased with the same boy's wages working in factory, shop, or mill. Children should not be ground in the mills, nor sweated in the factories and shops; their strength should not be sapped and their nerves racked by working in the heat and dust and noise of indoors; yet all children should learn to work. It is good for them and they joy in it.

This plan in operation would do much to solve the problem of the idle negro. A large part of the negroes of the Southern States live on the outskirts of cities and small towns. Their cabin homes are frequently on large lots and surrounded with vacant lots covered with weeds and rubbish. During the vacation months the negro children roam idly on the streets, falling into mischief and vice. Under proper direction they might make, on back yards and vacant lots, enough to support themselves and more. Their parents might then put into savings banks a good part of their earnings. With the money thus accumulated they could buy or build their own homes and gain some degree of that independence necessary for good citizenship for men and women of any race. The children would be kept from vice and would gain habits of industry. Incidentally these negro quarters would be changed from places of ugliness to places of beauty.

Probably the most valuable result of this plan would be found in the fact that it would make it easy for most children to attend school three or four years longer than they now do, a thing more and more desirable, since education for life and citizenship in our industrial, civic, and social democracy can not be obtained before the age of adolescence. In some way all children must have instruction and training after the years of childhood, or state and society must suffer for the failure. If a child can contribute to its support while in school, it may remain in school much longer than if it must be carried as a dead weight until it quits school to go to work.

The fact that a generation of men and women would be produced who would find their recreation after the close of their labor day of eight hours in profitable home gardening is not the least important reason for the introduction of this plan.

Compared with the results, the cost would be inconsiderable. No addition to the number of teachers would be required. It would only be necessary to require different preparation for one teacher in each school. Fifty thousand such teachers would be sufficient for all the city, town, and manufacturing village schools in the United States. To add $500 to the salary of one teacher in each school, in order to retain his services throughout the entire twelve months, would require an additional expenditure of $25,000,000, only one-twelfth of the present total cost of these schools and less than one-eighth of the total value of what might easily be produced by the healthful, joyous, educative labor of children who now spend much

more than half of their waking hours in idleness, hurtful to them physically, mentally, and morally.

VII. *Schools and the summer vacation.*—The average school term in the United States, even in the cities, is shorter than in many other countries. There is a growing sentiment in favor of longer terms for city schools and even for continuous session with brief vacations, probably at Christmas and Easter and in midsummer.

As already stated, there are in the cities, towns, manufacturing villages, and unincorporated suburban communities of the United States, approximately 13,000,000 children between the ages of 6 and 20, more than 9,500,000 of whom are enrolled in public and private schools. The average daily attendance is not much in excess of 6,500,000. These children are taught by approximately 300,000 teachers at a cost for all purposes of approximately $300,000,000. City schools are in session an average of about 180 days exclusive of holidays. The average school day is five hours. Children who attend school regularly and without tardiness have 900 hours of schooling in the year. The average attendance of those enrolled is 120 days, or 600 hours. There are in the year 8,760 hours, 5,110 waking hours for children who sleep 10 hours a day. Children who attend the full time are in the school a little less than one-third of the waking hours of 180 days and not in school at all 185 days. The average attendance is only about one-third of the waking hours of 120 days, with no attendance on 245 days. Children who attend all of the school hours of the year are in school 900 hours, and out of school 4,210 waking hours; the average is 600 hours in school and 4,510 waking hours out of the school.

Probably 15 per cent of these children are away from home during the summer vacation months or have useful employment, and 85 per cent or more are at home without useful occupation. They spend the time in idleness on the streets and alleys, without guidance, on vacant lots, or swelter in crowded houses and on superheated streets. Much that was learned at school is forgotten. Many of the children become criminals, and still more form habits of idleness.

The schools which are established and maintained for the purpose of educating children into manhood and womanhood, of preparing them for society and citizenship, and of giving them such knowledge and training as will enable them to make an honest living, should provide some kind of instruction for these children through what is now, in most cities, a long, wasteful vacation. I believe no one will claim that the addition of 400 or 500 hours to the number now spent in school would be a burden to any child. The addition of 3 school months of 5 hours a day would mean only 300 hours more in the school year for children attending regularly and promptly, and only 200 hours for the average child on the basis of present attendance. This would give 1,200 hours for children attending the full time and

800 hours for the average child; of course, much less than this for many.

Possibly the school day in the summer term should be not more than four hours; that is from 7 or 8 o'clock to 11 or 12 o'clock in the forenoon. School work can be done much better during these hours in the summer than in the present school hours of the winter months. Attendance is easier and buildings do not need to be heated. It might be necessary to change the school work, so as to give more laboratory and shopwork and less of the ordinary bookwork during the summer sessions than in the winter. Children attending the summer session under these conditions would, no doubt, be much happier and healthier than they are now when turned loose on streets and alleys with nothing to do. It is a mistake to suppose that children do not like to work. Children do like to work at whatever is of real benefit to them until they learn to be idle.

Careful studies made in different parts of the country and in schools of different kinds indicate that children really do not study in school more than an average of 3 hours a day, whatever may be the ength of the daily session. For children in the primary grades the time is less; for the high-school grades, somewhat more. This includes not only the time children give to their studies out of class but the time when they are really attending to their work in class. This indicates the desirability of reorganizing school work in such way as to give three hours a day for intensive school work of the ordinary type, and to provide four or five hours of productive work suited to the capacities of the children either at home, in shops under good conditions, in outdoor gardens, or in shops provided by the school. With this kind of organization it would be very easy for children to do ordinary school work three hours a day six days in the week, through 11 calendar months in the year, and at the same time contribute largely to their own support by well-directed, productive, educational work, either at home or in the school, thus making it possible for the great majority of children to remain in school throughout the high-school period.

The cost of adding the three months of school would be comparatively little. There would be no cost for fuel, the cost of attendance would be less, and the additional cost for teachers need not be in proportion to the number of days added. Whatever may be the terms of the contract, teachers are in fact employed by the year. Many of them do not use any large part of the vacation months in any profitable way. The addition of an average of $200 to the annual salary of the teacher would require a total of only about $60,000,000, or about 20 per cent of the total annual cost of the schools.

For most teachers the additional months in the school would not be a hardship, especially if the school days were shortened. Cer-

tainly this would be true if teachers could be relieved of a large amount of unnecessary bookkeeping, report making, and the reading of unnecessary examination papers, with which they are now burdened. It would cost very little more to employ teachers by the year, each teacher teaching three-quarters or two-thirds of the year after the plan already adopted in many colleges and universities.

VIII. *Continued education; part-time plans.*—The complex problems of our political, civic, industrial, social, and spiritual democracy demand of the masses of the people more extensive knowledge of facts and principles than can be given by the elementary schools, and a discipline and training different from any which can be gained in childhood before the years of adolescence. Children learn by imitation and accept and act on authority. In the pre-adolescent years they are unable to reason inductively to great fundamental principles, formulate them into words, and reason from them by deduction to intelligent practical applications in concrete new instances. But this is just what is most needed for the self-guidance required by democratic institutions and life. The education possible in childhood may be sufficient for citizenship in a benevolent despotism where a "little father" rules over his "children," in a society of rigid and unyielding stratification, in a feudalistic industrial organization in which the masses of people are only unthinking "hands," and in a spiritual despotism in which freedom of thought is unknown; but democratic government, government of the people, by the people, and for the people, is manhood government. Democratic institutions of whatever kind demand of all who participate in them such self-guidance as is impossible without an understanding of general principles and the habit of consecutive, abstract reasoning and individual initiative and self-restraint.

We must find some way of continuing the education of the great majority of children through the high-school period, through the years of early and middle adolescence. Under present economic conditions this will be possible only when we can find or devise some way by which boys and girls may contribute to their own support while attending school, or of continuing their studies out of school. In rural farming communities this is comparatively easy. Where good high schools are maintained in such communities and there are good elementary schools to prepare for them the per cent of high-school attendance is much larger than in most cities and manufacturing towns. The solution of this problem in cities and towns will probably be found in some part-time attendance plan involving the principles applied in the engineering school of the University of Cincinnati. In a small cotton-mill town in South Carolina for several years a school has been conducted for children of mill age.

The pupils are divided into two equal groups. While the children of one group are in school, those of the other group are working in the mills, the groups alternating weekly between school and mill, 25 weeks in school and 25 weeks in the mill each year. Boys and girls, teachers and mill foremen all agree that the plan is successful. The school work is satisfactory, and the boys and girls earn enough by their labor in the mill to pay for their food, clothing, and shelter. The pedagogical principles involved are sound, and with the intelligent and hearty cooperation of parents, teachers, school officers, and employers it might be applied in all cities, towns, and manufacturing communities. The cost would be small in proportion to results. In some places a school day of two or three hours, with four or five hours of productive work, might be found more practicable. Such a plan has been proposed for the schools of the city of Ogden, Utah, and is already in operation to a limited extent in several places.

IX. *Vocational education.*—With the disappearance of the apprenticeship system and the growing demand for skilled labor in many trades and industries, the demand for vocational education becomes more insistent. Not only must the courses of instruction in all public schools be varied and differentiated to meet the varying needs of all the children of all the people, they must also be so adjusted as to give the information and training necessary for intelligent and successful employment in all standard occupations. Whatever is needed to be done for the welfare of society in city or State should be taught in the public schools, unless it can be taught elsewhere better and more economically.

As yet we know little of vocational education and of the best form of organization, support, and management for vocational schools. In this matter we have made much less progress than have some other countries, from which we may well learn. No doubt we shall need to establish many separate trade schools, with an organization in many ways unlike that of the public schools we now have. We shall need to foster trade schools maintained by manufacturing and mercantile corporations. We shall need to organize many short trade courses in the ordinary public schools and make liberal concessions as to time of the attendance of children upon them. We shall probably need to inaugurate a system of continuation schools modeled after those of Munich and other European cities. All this will require the hearty cooperation of school officers and employers of skilled labor. Whatever may be the solution of the problem of vocational education, it is quite clear that two things should be held firmly in mind: (1) that all education is one thing and not many, and that vocational schools are an integral part of our common school system; (2) that whatever may be the trade by which one makes a living,

humanity and citizenship, with all their meaning and requirements, are common to all, and must be considered in the education of all individuals and classes.

X. *County libraries.*—The education of the schools, however full and complete it may be, can never be considered sufficient for the needs of the people in a country like ours. It must be supplemented by constant reading during and after school years. This supplementary reading can not be so abundant and so well directed as it should be without collections of well-selected books accessible to all the people.

Despite all progress in the establishment of libraries through the assistance of Mr. Carnegie and others within the last quarter of a century, the great majority of the people of the United States are still without access to any adequate collection of books. Most of the cities having a population of 25,000 or more and many smaller cities have good public libraries, but most of these are only for the people living within the corporate limits of the cities or within their immediate suburbs. Most of the people living in small towns, villages, and the open country are still without library facilities. In many parts of the country there are circulating libraries. These do much good, but they can not take the place of permanent libraries.

There is great need for county libraries located at county seats with branches in all the towns and villages of the county and in the public schools. To establish such libraries should be our next step in library development. One wonders why more effort has not been made to establish libraries for country people or to open city libraries for their use. People living in the country, particularly young people in the country, have more time to read than city people, and as a rule they are, I believe, interested in a better class of literature. Boys on the farm and girls in the farm home have many hours every week in the year and frequently whole days and weeks which they might give to reading. They are free from the dissipation of the city. Their close contact with nature and the fundamental needs of life gives them an intelligent interest in biography, history, books of travel, and books of popular science. The larger interest in scientific agriculture developed in recent years has made many farmers eager for books that will help them in the cultivation of the soil, the care of live stock, the marketing of products, and many other activities and interests of farm life. The extension of good roads, the telephone, and the newspaper, and the closer contact of political and economic life have created a desire for books on political and social questions. Country people are no longer satisfied with the campaign stump speech and the more or less partisan newspaper.

Here is an opportunity for men of moderate wealth to build for themselves lasting monuments and at the same time do much good

by making donations of from $25,000 to $50,000 for county library buildings, on condition that the county will levy a tax for the upkeep of the library and its branches.

Something like this has already been done in a few counties in different parts of the country, notably in Ohio and California. One of the best examples of cooperation in the establishment and maintenance of a county library is in Van Wert County, Ohio. In this county John Sanford Brumback, a citizen and business man of the county seat, left in his will a fund which, by his heirs, was increased to $50,000, for the erection of a public library building. The city gave a site for the building in its central park. A library association which had accumulated a small collection of books donated this collection to the library and the county authorities levied a tax on all the property of the county for the purchase of books and the care of the library. The collection is now large and varied enough to offer reading matter to all the people of the county whatever their interests may be. The reading rooms are open to the people of the county. Eighteen or 20 branch libraries are maintained in villages and at crossroads, and books are distributed through the public schools of the county. In this way all the people of the county are supplied with good reading matter at very small cost. Every county in the United States ought to have such a library. Every town and city library ought to make some arrangement by which its books would be free to the people of the county in which the libraries are located.

With county libraries in all its county seats and their branches in all its villages and schools, a State might well organize these into a system and supplement them by establishing and maintaining at the capital city a State library open to all the people of the State, where the rarer and more costly books, which are less frequently called for than others, but which every library must have on its shelves or within easy reach if it is to be relied upon for help by all the people, might be kept in such numbers as may be necessary to enable it to respond to the demands of county libraries.

XI. *Better organization in higher education.*—There is much need of better organization of our systems of higher education, more definite standards for admission to and graduation from college, and a better understood differentiation in the field and work of colleges of different kinds and widely different equipment and wealth.

There are in the United States more than 600 universities, colleges, and other institutions which confer on students the bachelor's degree at the end of a course of study of three or four years. The endowment and equipment of many of these are such as to enable them to do thoroughly and well four years of work, and their standards are such as to give a fairly definite meaning to the degrees conferred by

them. Many have incomes so small and equipment so meager that it is impossible for them to do with any degree of satisfaction the work which should be expected of a standard college. Of many the standards of admission and graduation are so low and uncertain that the diplomas and degrees conferred by them have no definite meaning. For the six hundred and more colleges the requirements for admission vary from the 16 units of a good high-school course of four years down to the uncertain acquirements of boys and girls who have had only such instruction and training as can be gained in the elementary schools of country and village communities. The requirements for graduation vary from four years of college work based on the four years of good high-school work done under teachers of first-class ability with the help of well-equipped laboratories and libraries down to the indefinite requirements of the institutions with no standards of admission, poorly prepared instructors, and the most meager equipment of laboratories and libraries, and whose students go out with diplomas and degrees after having had less instruction and training than that which may be had in the better high schools. Because of this wide variation in standards American college diplomas and degrees have no definite meaning at home or abroad.

The poorer institutions with small equipment are giving most of their time, attention, and strength to a very few students in their junior and senior classes, while the larger number of students in the lower classes receive comparatively little attention. Much of the work which they attempt to do can not be done effectively because of lack of library and laboratory equipment. Some of the richer colleges and universities center their attention and efforts on their large groups of graduate students and undergraduates in the upper classes, while the thousands of students in their overcrowded freshman and sophomore classes do less satisfactory work than they might do under better conditions in smaller institutions. In both classes of institutions freshman and sophomore students are taught largely by professors, assistants, and instructors of less ability and with less experience than those who direct and instruct the higher classes. Many of the students in the freshman class are, after all, only boys and girls who a few months ago were working in the public high schools under high-school conditions, quite different from the conditions which obtain in the larger and richer colleges. These younger students especially feel the lack of sympathetic, personal contact with men and women of strong personality and high ideals and broad sympathies. For these reasons, these students get much less than they should out of their first years in college. Many of them lose their inspiration, fail in their class work, become discouraged, and quit. Records show that approximately 60 per cent of those who enter the freshman class fall out before the beginning of the junior

year. There is need both that colleges with small incomes and meager equipment should cease to try to do the advanced work requiring large faculties and costly equipment and that students of freshman and sophomore years, who constitute a large majority of the college students, should be given more consideration than they are now given. To this end two or three hundred of the smaller colleges should become junior colleges and give all their strength to the work of the first two college years. The junior colleges should require for admission the same preparation that is required by any standard college. If for any reason it should be necessary for them to do work of a lower grade, it should be done in an academy or a preparatory school definitely recognized as such.

The equipment in laboratories and libraries necessary for good work in the freshman and sophomore classes is much less costly than that which is needed for good work in the junior and senior classes. Instructors of students should be men and women of good scholarship. They should have a firm grasp on the principles of education, experience and skill in teaching, a comprehensive knowledge of life, strong personality, broad sympathy, and ability to inspire students with a desire for knowledge and to encourage them to do their best work. To get the help and services of such men and women will require larger salaries than the smaller colleges can pay so long as they continue to spread their work over the full four years. But they might be had if these colleges would use all their income available for salaries in employing a few men and women of first-class ability for lower class work. A junior college with an annual income of forty or fifty thousand dollars might well divide this among ten or a dozen instructors, paying them from four to six thousand dollars each.

Under these conditions students would accomplish in two years little less than is now accomplished by most in three years. A much larger per cent of those entering college would remain through the second year and the number gaining such impetus as would carry them through the higher classes would be very much larger than it is now. The work and opportunity of the junior college here suggested are in every way worthy of any institution of comparatively small means.

An objection frequently urged against the junior college is that students would have to leave without a degree. This objection might be met in two ways. First, by adopting some new degree, such as that of an Associate in Arts, or Associate in Science, as has been suggested by various persons, or second, by giving the bachelor's degree at the end of two years and the master's degree at the end of the four years of full college work. Either of these plans would provide recognition of the efforts of the large number of college students who now leave college without a degree. More than two-

thirds of them do. The tendency toward dividing our 12 years of elementary and secondary schooling into two periods of six years each is increasing, and within a few years the practice will no doubt become quite common. As has already been pointed out, the general adoption of this plan, accompanied by more care in the selection of high-school teachers and the promotion of elementary teachers with their children from grade to grade instead of the present practice of promoting children from teacher to teacher, will result in a degree of scholarship and training for high-school graduates which would be represented by an addition of one or two years to the present 12 years of elementary and high-school training under present conditions. With this better preparation and the better work made possible in the first two years of the junior college, the bachelor's degree given at the end of these two years would mean little less, and in many instances probably more, than it now means when given at the end of four years. The better work done by the junior colleges would, of course, make the larger colleges with their full courses of four years give more attention than they now do to their lower classes.

Many of the older and better colleges with long-established reputation for thorough and honest work, but whose incomes are small as compared with the larger State universities and the more richly endowed private institutions, should no doubt continue to do four years of college work, but instead of offering a large variety of courses in widely different subjects and thus reducing to a small minimum the amount of funds that can be used in any one faculty, should concentrate their efforts on one group of subjects, thus enabling them to do this work with the greatest possible efficiency and to gain a reputation which would attract to them young men and women interested in that particular group of subjects.

The readjustments here suggested would even add very largely to the value and effectiveness of our system of higher education. Should the better work of the junior colleges centering their strength and efforts on the first two years of college work result in a smaller attendance in those years in the larger and richer institutions, these institutions would thereby be able to do more and better work in the later years and for graduate students.

XII. *Better teachers.*—In schools of all grades and kinds results must depend primarily and almost wholly on the teacher. There is much truth in the sayings: "As is the teacher, so is the school," "The teacher is the school," "The teacher makes the school and, like every other creator, makes it in his own image and likeness." The efforts of legislatures, governors, school officers, and people for the education of the children of the State, city, or district, all end in bringing together groups of children with men and women called teachers. Neither officers, laws, taxpayers, money, or houses teach:

they only provide the situation. What comes out of the situation must depend on the teacher. If the teacher is efficient, the results may in some degree approximate the ideals and expectations of the people and the needs of society and State. If the teacher is inefficient, then legislation is in vain, the money paid for schools is wasted, the time and opportunity of the children are frittered away, the hopes of parents are blasted, and society and State are cheated out of that which they have paid for, the right education and training of their future members and citizens. Since in a democracy everything waits on the education of the people, since the school is the most important agency of education, and since the character and results of the school depend on the teacher, the selection and preparation of teachers for its schools become therefore the most important task and function of the democracy. If a democracy succeeds in this, then it succeeds; if it fails in this, then it fails in all and must soon give place to some form of government, society, and industrial organization less dependent on the intelligence, virtue, skill, and good will of all the people. Civilization and progress have long halted and still go forward more slowly than they should because too little attention has been and is given to this all-important factor.

The teachers of children and youth should be well born. They should be men and women of good native ability with abundant vitality and strong well-balanced nervous organization, positive and aggressive rather than negative and passive. As President Daniel Coit Gilman used to say, they should be "strong men, tall men, broad-shouldered men, sun-crowned men," or women like unto them. They should be honest men and women, intellectually honest, truth lovers and truth seekers, willing and eager to find the truth wherever it may be and to teach it whatever it may be, knowing that the truth and only the truth can give strength and freedom, knowing that truth is sacred however newly discovered, and falsehood and a lie, false however old and however intimately interwoven with social, political, civic, industrial, economic, educational and religious life and institutions, and however dear and flattering to the individual. They should be industrious, hard working men and women, willing to give time and energy that they may guide their pupils and students most surely to the fountains of knowledge and in the paths of life. They should be sympathetic men and women, broad minded, the windows of their souls open, fully appreciative of the true, the beautiful and the good wherever found, and patient of faults and failings and failures. They should be men and women of fine culture, readers of the great books, lovers of the best in art, sensitive to the beauties and sublimities of nature, ever eager for companionship with men and women of culture and sterling worth. They should be practical men and women with the rare gift of uncom-

mon common sense. They should be democratic men and women with a full appreciation of the dignity and worth of humanity in every race and every individual, unwilling to accept for themselves that which any other man or woman may not have on equal terms, and striving to so conduct themselves toward others that if their conduct and the principles out of which it grows should become law, they whould be willing to abide thereby. They should know well the subjects they teach, not as pupils reaching up and trying to understand and remember, but as masters, whose knowledge must be comprehensively analytic and synthetic. They should be able to teach and speak as having authority and not as the scribes. They should know the children whom they teach and something of the laws of the development of their minds so as to be able at least to detect the budding points of their souls, the nascent stages of interest so important in all education, and to assist those whom they teach to acquire both knowledge and wisdom. They should have an intelligent grasp on the fundamental principles of education and that skill in teaching which comes only from intelligent experience guided by the lessons of the history of education. They should be no triflers but earnest men and women, since they deal with our most valuable possessions, time, opportunity, and life itself. They should not be timeservers but farseeing, since they build, not for the present but for the future, and determine the destinies of individuals, society, State, and Nation.

That the value of the services of such men and women can never be measured in money may be true, but we should not expect to obtain such services for our schools without paying for them at least enough to enable those who serve to live. As yet the teacher is the poorest paid servant of society. The annual average salary of teachers in the elementary and secondary schools of the United States in city and country is $491.62—for men $616.83, for women $458.51. I think we may not expect to get and retain for our schools the services of men and women of the type I have indicated for less than the wages of a washerwoman, less by half than the wages of a mail carrier, and less by two-thirds than the wages of a carpenter, a bricklayer, or a plumber. We profess to believe in education and talk of our teachers as the standing army of the Republic, and of our schoolhouses as the fortifications which hold back the invasions of ignorance, vice, anarchy, and economic inefficiency, but the salaries of teachers are still criminally low, and the sum total of expenditures for schools pitifully and absurdly small. Years ago Dr. Charles W. Eliot called attention to the fact that for the individual in civilized society and for that society itself, education is as important a factor in life as food, clothing, or shelter, and should have as large a claim on the resources of the individual and society. In these times of

the high cost of living and low salaries of teachers, we are far from the ideal of devoting as much money to the support of schools as we pay for either food, clothing, or shelter.

Nor may we hope to have competent teachers at whatever salary for all our schools until we establish and maintain a larger number of training schools for teachers. Though we have accepted the doctrine of public education at the expense of the public, we have not yet accepted the responsibility of preparing at public expense a sufficient number of competent teachers to supply all the schools, so that money, time, and opportunity may not be lost.

SUGGESTIONS FOR MODIFICATION IN POLICY OF EDUCATION FOR NATIVES OF ALASKA.

I wish to call attention to the section on the education of natives in Alaska in this report (pp. 632–642). A careful reading of this section and of the reports of schools, medical relief, and reindeer service for natives in Alaska in past years reveals the fact which personal investigation confirms, that the administration of these interests has been wise and the results good. The more I see and learn of what has been done for the natives of Alaska with small appropriations, under my predecessors in office, the more I am convinced of the value of their work. I have no adverse criticism to make of anything they have done, but the time has now come when we should begin a new policy, for which the work done has prepared the way.

The natives of Alaska, about 25,000 in number, are spread over more than 350,000 miles of the 590,000 square miles of the Territory. Their small settlements extend along 10,000 miles of coast and on both sides of the Yukon River and its tributaries, for a distance of more than 2,500 miles. If the map of Alaska were spread on the map of the United States, our Government schools would fall in 21 different States. One of our supervision districts contains a full hundred thousand square miles, the others average more than 65,000 square miles each. Of the natives of Alaska, approximately 11,000 belong to 6 tribes of Indians in southeastern and southern Alaska and in the valley of the Yukon. About 11,000 are Eskimos, on the western and northwestern coast, along the Bering Sea, the Bering Straits, and the Artic Ocean. Something more than 3,000 are Aleuts and mixed races scattered through the Aleutian Islands.

Until recently the natives of Alaska lived wholly by hunting and fishing. For generations they have been exploited by white traders, who have bought their furs and fish and sold them goods at their own prices, frequently a small fraction of the true value of articles bought and many times the true value of goods sold. Necessarily a hardy people, their health and strength have in recent years been

affected by the white man's diseases and the white man's liquors. They are a peaceable, law-abiding, faithful, and trustworthy people. They have never rebelled against the Government or authority of the United States, and no money has been spent in Alaska in defending white settlements against attacks by the natives. The Government teachers, often single women, live in their scattered villages, far from white settlements and from the protection of forts and police force, unharmed and unafraid.

The United States bought Alaska from Russia and paid to Russia the purchase money. Nothing has ever been paid to the natives for their rights in the soil and the waters. Timberlands, hunting grounds, mining claims, and fishing waters have been taken without compensation. The natives therefore have no large funds on which interest is paid, as have many Indian tribes in the States; no revenues from oil and coal lands, from gold fields and copper mines, nor from forest reserves and fishing grounds come to them in royalties. From the United States Government they have received only the small amount appropriated for education and for the purchase and care of reindeer, administered by the Bureau of Education, and an occasional small fund as relief from disaster by volcano, storms, and floods.

The total appropriation for education, including medical relief and support of the destitute, through 30 years, from July 1, 1884, to June 30, 1914, has been $2,419,438.46, an average of $80,485.75 a year, out of which for 10 years the cost of schools for white children was taken. The total appropriation for reindeer from 1892, when the importation of deer was begun, to June 30, 1914, is $302,000; the title in reindeer to the value of $96,325 still lies in the Government. If the money used for the education of white children and the value of the reindeer still owned by the Government be deducted, the Indians, Eskimos, and Aleuts of Alaska have cost the Federal Government less than $50,000 a year from the time of the purchase of Alaska until now—less than $2 per person per year; for the whole period of 47 years only as much per capita as our Government appropriates in two years for the Indians of the States. The current appropriations for natives in Alaska, $205,000, including the care of the Government's reindeer herd of approximately 4,000 deer, is at the rate of $8.56 per capita. This is small when compared with the appropriations for Indians in the States, which is for all purposes $47.54 per capita; $12.31 per capita of the total population for the support of Indian schools, not including the $162,000 for the school at Carlisle, Pa., although many Indian children of the States attend the public schools supported by the State and municipal governments; $14.35 per capita for purposes similar to those for which Alaskan appropriations are made. This comparison of appropriations is made not in criticism of our more liberal policy toward these

Indians, but to suggest the need of larger appropriations than are now made for the natives of Alaska, who live under harder conditions.

Appropriations for natives in Alaska for the current year fall under two heads—education of natives in Alaska, $200,000; reindeer for Alaska, $5,000. The work of the bureau is, however, of four kinds—education, medical relief, relief of destitution, and distribution of reindeer and training herders. The appropriation of $200,000 covers the first three of these items. For the present fiscal year the allotment for medical relief is $36,000, and for relief of destitution $1,800, leaving only $162,200 for education, including the expenses of offices at Washington, Seattle, and Nome, the cost of buildings and repairs, supplies, fuel, and freight. Freight rates to the western and northwestern sections and to the upper Yukon are heavy.

With our fuller knowledge of health conditions of the natives the need for larger funds for medical relief becomes more apparent. It is hard to let men, women, and children die without attendance. As the need for a larger fund for medical relief has grown, it has become necessary to close schools already established. Six schools in villages having a population of approximately 800 were closed last fall. The children of these villages are now without schools and the people without the advice and help of the teachers in matters pertaining to sanitation, economy, and moral life.

Of these 5,405 native children (partly estimated) in Alaska, 3,500 are this year in Government schools, 300 in 6 mission schools, 60 in 2 schools supported by the Department of Commerce on the Seal Islands, and about 150 in Government boarding schools in the States, leaving approximately 1,400 not in school anywhere. Since practically all the children of every village in which there is a school are enrolled, these 1,400 children are in villages or settlements in which no schools are maintained. About 200 of these are in villages in which schools have been closed for want of funds; nearly 600 are in other places large enough to justify the establishment and maintenance of schools; more than 600 live in scattered settlements of from 2 to 5 or 6 houses or belong to wandering bands. These last it will be very difficult or impossible to reach until they can be brought together into larger communities, as suggested below.

The 5,500 Indians of southeastern Alaska live in 25 or 30 settlements, ranging in size from 625 at Metlakahtla on Annette Island down to 10 or 15 in remote places. We now have or have had 24 schools in this section, most of them with only one teacher and some with an attendance so small that the relative cost is very large. In most of the villages there is no employment for the people lasting through the year. In the canning season all the people—men, women, and children—go away to the fishing grounds and the canneries, where they live in shacks and tents with little comfort and surrounded by

much filth. Men and boys make good wages, from $200 to $600 a season, catching salmon for the canneries at $15 to $35 a thousand. When canned these fish are worth from $250 to $500 a thousand. Women and children work in the canneries. In winter many families go to the trapping grounds. For lumber and furniture for their houses and for food and clothing natives pay unnecessarily high prices to white traders. In the small villages, from which the natives are absent a large part of the year, school terms are short, teachers come and go, and too often they are not qualified for the most important parts of their work. Since the natives have no permanent employment at home, their village homes are broken up four or five months in the year. Receiving small pay for their labor and paying large prices for the necessities of life, they can make only very slow progress in social and civic development. The remedy lies, I believe, in bringing the people together in villages of from 400 to 600 inhabitants. These villages should be located at suitable places on reserves from which undesirable classes of white people may be excluded until the natives reach a stage of development and gain such knowledge of trade and industries as will enable them to deal with white men on terms more nearly equal. The five and a half thousand natives of southeastern Alaska might well be assembled in 10 or 12 places at most. The reserves should be made not for the purpose of fencing Indians in, but for keeping out white men who would exploit, debauch, or corrupt them. Such reserves can now be made without prejudice to the legitimate interests of the white settlers. The Territory is large. The few thousand square miles needed for the reserves will not be missed. On each of these reserves we should lay out a village, keeping in mind health, convenience, beauty and attractiveness. Ample grounds should be set apart for school and church houses, homes for teachers and missionaries, cooperative stores, and such industrial plants as may be found suitable to the needs of the place. In each such village a man and his wife should be put as teachers, and there should be a third teacher who might well be an unmarried woman, preferably a relative of the others. The man should have sound judgment as to what the natives are capable of doing and becoming, and he should become a practical director of the industrial life of the men and older boys of the village. His wife should have practical knowledge of nursing and be able to direct and help the women in making their homes better and cleaner and in caring for their children. She should instruct the girls and the older women in their homes, in housekeeping, cooking, sewing, and other household arts. The third person should be an expert teacher of such school subjects as are most practical for the children in their present stage of civilization, and living under the conditions necessary to their country and climate. For a part of the year, at least, this

teacher should have the assistance of the two others in the school work. If the village is large and the industries are of such nature and quantity as to justify it, there should be a second man to assist in directing them. The teachers should remain at their posts all the year round, and should be employed with the understanding that they will be given permanent tenure as soon as they have proved to be competent and their work satisfactory. They should remain at one place 8 or 10 years, at least. At some of these villages, probably at most of them, small sawmills should be put in by the Government, and the natives should be allowed to take them over and pay for them in installments, as is now being done at the new consolidated village of Hydaburg. This will enable the natives to supply themselves with lumber for houses and board walks (all streets and sidewalks in this part of Alaska are built of heavy boards), for furniture for the Government schoolhouses and for houses for teachers at little more than half the price now paid. It would also enable them to supply lumber to the canneries and some of the white settlers at a good profit. Timber is plentiful, and with a little direction the natives soon become expert in making lumber. The large sawmill at Sitka is manned by Indians, whose wages run from $3 to $5.50 a day.

Each village should have a shop for building boats and making simple, strong, and serviceable furniture. The natives use hundreds of rowboats and gasoline launches in fishing and traveling. All the highways are water. With a little instruction the people become good boat builders. Last summer we traveled hundreds of miles with an Indian on a seaworthy boat 50 feet long which he had built himself and on which he had installed a gasoline engine of 30 horsepower. This man had also built his own house of two stories and 8 or 10 rooms. At Sitka I saw natives building boats, trim and neat, and earning $5 or $6 a day. For the cheap tawdry furniture which the natives now buy at high prices they might substitute strong, durable furniture of their own make. We should give them plans for their houses and show them how to build them for decency, comfort, and convenience. They like to build, and many of their houses are pretentious and comparatively costly. Few of them are sanitary, comfortable, or so built as to provide for privacy. The sanitary conditions of most of the villages are very bad. With a little help and direction, clean, pure water could be provided at each village and some better means of disposing of filth. At most of the villages small salmon canneries might be made profitable, also small plants for mild-curing and for the cold storage of fish. These would give the natives employment at home through a much larger part of the year and a larger share in the profits from their labor. At a few places, notably at Haines and Klukwan on the Chilkat River and at Killisnoo, there is oppor-

tunity for employment in intensive farming and gardening. At Haines last year strawberries from a half acre were sold by a rancher for more than $1,400. In the school garden at Klukwan 20 varieties of vegetables and grains were grown so successfully as to show that they might be cultivated profitably by the natives. Berries grow wild in great profusion. With a small home canning outfit, costing not more than $150 delivered, thousands of dollars worth of berries and vegetables might be canned for home use and for sale. On the Chilkat River and probably elsewhere in southeastern Alaska a few cows might be kept for their milk, and it seems probable that goats might be herded profitably, as are reindeer farther north.

With a little wise and careful direction in the matter of buying and selling, keeping books, and banking, the natives of each village might conduct a cooperative store profitably, selling their fish, furs, baskets, and trinkets, and buying their clothing and groceries through it, thus saving for themselves the large profits which they now pay to the traders. In all of these things the Government teachers should give instruction and furnish leadership, always without any share in the profits of the industry or trading, and without other remuneration than their salaries. The missionaries sent by the churches to these villages should cooperate heartily with the teachers in this work. I believe they would do so in most instances.

Many of the Indians, probably most of them, would still go away to the fishing and hunting grounds and to the large canneries during the season, but some would remain at home engaged in their own business, and the village and its homes would not be broken up during these months. Gradually the people would take on the ways of a more stable civilization. It is easy to believe that in a few years they would be able to begin to contribute largely to the support of their schools and hospitals. The policy here outlined and already begun in the southeastern section contemplates this.

That this policy is practicable is already proven in the village of Metlakahtla, with more than 600 inhabitants, and its sawmill, canneries, and store, until recently managed very successfully by Mr. Duncan; in our new consolidated village of Hydaburg, with its sawmill and cooperative store, under the direction of Mr. and Mrs. Hawkesworth, Government teachers; in the village of Klukwan, where we have as teachers Mr. F. R. Shaver, a man of good practical ability, a born mechanic, and a graduate of the Agricultural College of the University of Minnesota, his wife a graduate of a Minneapolis training school for nurses, and his sister, a widow and a motherly woman of 30, with professional training and successful experience as a teacher. In two years the Hydaburg people, coming together from three villages, have turned a dense forest into a thriving little town with a busy wharf, a sawmill that turns them out good lumber

at a cost of $10 a thousand, neat single-family homes instead of the communal houses in which they lived in their old villages, a long boarded street of which they are proud as the finest in Alaska, and a cooperative store, which the first year made a clear profit of 125 per cent, paying a cash dividend of 50 per cent and adding 75 per cent to the capital stock.

The cooperative store at Klukwan made a profit of 30 per cent last year, although the direction given by the teacher was less than at Hydaburg. The capital stock in these stores is divided into shares of $10. The teachers are allowed to own only a very small part of the stock. Permission to own any at all is given only at the request of the natives. No other white man may own any. The banking is done in Seattle.

For convenience and clearness in stating this policy, I have spoken only of southeastern Alaska. With necessary modifications to adapt it to changing condition it will apply equally well to most of the country. Along the Yukon, where the natives live almost wholly by hunting and trapping, the reservations would need to be larger than elsewhere. Among the northern Eskimos, who live by herding reindeer or by fishing and hunting on the ice floes, the settlements must needs be smaller than elsewhere.

That the plan of industrial leadership and cooperation will work under the most adverse conditions is indicated by the results of the work of our teachers, Mr. and Mrs. H. G. Seller, on Atka Island. This is a treeless island in the Aleutian chain, 1,800 miles west of Seattle. It has a population of 73 Aleuts, many of whom live in sod houses, their only industries fishing, hunting foxes, and making baskets. They have nothing to sell except their fox skins and baskets. They have been selling their fur skins to the local and passing traders at from $5 to $8 each and buying goods at three or four times their cost in Seattle. For lumber costing $12 a thousand in Seattle they paid $50 a thousand, and for shingles worth $2.25 a thousand in Seattle they paid $8 a thousand. Last year under instructions from the Bureau of Education, Mr. Seller assisted them in beginning cooperative buying and selling. They sent their fox skins to Seattle by express and mail and sold them at auction on the fur market at prices ranging from $17 to $66. With the proceeds of the sales our superintendent of education of natives of Alaska bought and shipped to them a quantity of lumber which cost them only $33 a thousand delivered on their island. With a continuation of this policy even the natives of this barren island may soon be able to live in comfortable houses and possibly contribute toward the support of their schools, thus gaining for themselves the feeling of self-helpfulness and independence so invaluable to any people.

It is not expected that this consolidation of settlements and establishment of industries can be perfected at once. It must be gradual; no compulsion can or should be used. By wise and tactful management and with a very small increase in appropriations it can, I believe, be well under way in 10 or 15 years, and the population now scattered through approximately 150 settlements be brought together in not more than 50 or 60 places. Thus the natives may become not only self-supporting but also a very valuable part of the population of the country.

Careful investigation will be necessary to determine the best places for consolidated settlements. Present settlements, probable future developments, physical conditions, affiliations of the people—all these and more must be considered. It seems quite certain, however, the following places are suited for permanent settlements: Metlakahtla on Annette Island, to which the Tsimpseans who have wandered away may be brought back; Hydaburg, where the rest of the Hydas may be brought; Klukwan, where the smaller settlements of Chilkats may be gathered; Klawock, where a cooperative store has been started; Killisnoo, or Kake, or Hoonah, where the Thlingets may be gathered; some point near Juneau, where the natives now living in the outskirts of Juneau and Douglas under slum conditions may be brought together; Sitka, an old and prosperous settlement, and Port Moller, on the Alaska peninsula.

Health conditions and medical relief.—All who have studied health conditions among the natives, including two physicians from the Public Health Service, are agreed that for adequate medical treatment and the establishment of proper health conditions so important for the natives and for the white settlers who can not avoid coming in contact with them, there is imperative need for approximately 10 small hospitals in 10 of the most accessible places, one or more sanitariums for tuberculous patients, and a larger number of physicians and field nurses than we now have.

Teachers' reports of health conditions indicate a total of 700 cases of tuberculosis, 275 cases of blindness, and 300 cripples in the Territory. Examinations made of 4,836 individuals by Dr. Emil Krulish indicate more than 1,200 cases of tuberculosis, more than 2,000 cases of trachoma and other eye diseases, and 600 cases of syphilis. A more careful examination made by Dr. Krulish of 2,494 individuals out of an estimated population of about 5,500 in the southeastern district indicates a total of approximately 500 cases of eye trouble and 325 cases of tuberculosis in that district.

We must consent to let the people suffer and die without help, not only those now suffering from disease, but also those to whom these diseases will be transferred under present conditions, both natives and white settlers, or we must provide physicians, nurses, hospitals,

and sanitariums necessary to meet the conditions, care for the sick, and protect the well.

For many reasons, Haines, at the mouth of the Chilkat River or a point farther up the river, is especially suited for a sanitarium for the care and cure of tuberculous patients. The temperature is comparatively mild; the atmosphere is dry. Twenty miles above Haines the annual rainfall is only 18 inches, and the lowest temperature on record is 28° below zero. The percentage of clear days is large. The mountains protect from severe winds.

As soon as possible we should have 10 small hospitals, probably at the following places: Juneau, Klawock, Seldovia, Kanakanak, Kuskokwim River, Nome, Kotzebue, Point Barrow, Tanana, and Nulato; and two sanitariums, one on the Chilkat River and one somewhere on the western coast, probably in the neighborhood of Norton Sound.

All hospitals should, of course, be built at places where large settlements can be built up. The presence of a hospital at one of these places will be an additional inducement to the natives to move in from their smaller and more remote settlements. As hospitals are established the number of field physicians and nurses may be decreased. Natives should, under the policy already outlined, be able to pay more and more of their own medical bills as the years go by. A generous policy now means good economy and a smaller total of expenditures in the end.

Reindeer.—Reindeer were first introduced into Alaska in 1892. From that time until 1902, when importations ceased, 1,280 reindeer were brought in. When the importations began, the 12,000 Eskimos of the western and northwestern coast had no means of support other than the precarious means of hunting and fishing, and their life was the uncertain wandering life of the hunter and fisher. There was nothing in which they could accumulate wealth and no way in which they could provide against want, should hunting and fishing fail for a season.

The total appropriations for the purchase, care, and distribution of reindeer and the training of herders, to June 30, 1913, was $297,000. At the close of this fiscal year there were in Alaska (in 62 herds) 47,266 reindeer. Of these the Government owned 3,853 distributed among 34 of the 62 herds; 797 natives owned 30,532; Laplanders, brought over in the beginning to teach the natives to herd and care for reindeer, owned 7,834; missions owned 5,047. At $25 per head the value of the Government reindeer was $96,325; of the reindeer owned by natives, $763,300. The total value of all the reindeer in Alaska was $1,181,650. The total income from reindeer to that date was $281,271. The total of the income and the value of reindeer to June 30, 1913, was $1,462,921, a profit of 392 per cent on the investment. The increase in reindeer in the fiscal year ended June 30, 1913,

was 8,790, valued at $219,750. The income from the use of reindeer and from deer slaughtered within the year was $81,111, which, added to the increase in value, makes a total of $300,861 for the year, or $3,861 more than the total of all the appropriations made for reindeer by the Government from the beginning to that date.

These figures seem to indicate that this business has been well managed and not unprofitable. To the money value must be added the fact that these Eskimos have through this means been advanced more in civilization in two decades than they otherwise could have been in a century. They now have a sure and increasing means of support. At the end of the present fiscal year there will be in this part of Alaska an average of five deer, worth $125, for each native inhabitant.

The only cost of the deer is that of their intelligent and watchful care. There is no cost for feed. The tundras on which reindeer moss is found are capable of supporting approximately 5,000,000 deer. When this number has been reached they may be slaughtered at the rate of a million a year without decreasing their number. Twenty-five million dollars worth of reindeer meat a year will not be an inconsiderable item in supplying the future population and for export to the States.

Although there has been rapid increase in the number and value of reindeer within the last few years, their distribution has not yet been carried to the extent it should. The large herds should be broken up and the Government reindeer made into new herds, some of them in places quite distant from their present location.

The policy here outlined will cost only a little more now and much less in the end than the continuation of our present policy, and it will, I believe, more surely and more quickly result in the eradication of unnecessary diseases and in the attainment of such a degree of industrial efficiency as will make these people not only self-supporting but an important factor in the development of this territory.

Respectfully submitted.

P. P. Claxton,
Commissioner.

The Secretary of the Interior.

CHAPTER I.

INTRODUCTORY SURVEY.

By W. Carson Ryan, Jr.,

Editorial Division, Bureau of Education.

Contents.—The vocationalizing of education—External change—Health supervision—Rural Education—Education for citizenship—Moral training—The unevenness of progress. Organizing for efficiency.

The significant element in educational progress to-day is the new spirit of social democracy in education: That all children—not that assumed psychological average known as the child, but all children—are entitled to an equal educational opportunity; the privilege of developing in accordance with inborn aptitudes and the welfare of a society based on serving and being served. It is this idea that gives vitality to the general demand for "productional education," whether that demand be expressed in the work school of Kerschensteiner; in the houses of childhood of Montessori; in the gardening work of the farm-life schools in various parts of the United States; in the basketry and lace making taught by American teachers in the Philippines; or in the vocational movement itself, which ought to have for its larger aim the broadening of State-provided educational opportunities to meet the needs, not of this or that special group, but of every individual as an individual and of society as a whole.

THE VOCATIONALIZING OF EDUCATION.

Viewed in relation to the readjustment and reorganization that are taking place, the vocationalizing of education remains the dominant note of the year. It will probably continue to be of paramount importance for many years, since the vocational movement in its larger aspects bears such vital relation to the whole problem of widening democracy.

The vocational movement in the United States has been characterized by considerable confusion of terms, and during the past year the leaders have sought to differentiate sharply between what may be called *vocational education* and *education for life;* between real vocational training and a number of admirable innovations that are frequently referred to as vocational.

There are in reality two distinct movements, of different origin, that tend to fuse at certain points. One is the movement for definite vocational training; specifically, the attempt to do for the industries, agriculture, and home making—the more directly productional occupations, in other words—what is already done more or less for the professions. The other is to relate education to life by using everyday human activities as a basis of instruction instead of books. One might be described as education *for* work; the other as education *by* work.

Vocational education, as defined by the Massachusetts commissioner of education, and written into the laws of several States, is "any education whose controlling purpose is to fit for a recognized occupation." Law schools, medical schools, engineering schools, normal schools, furnish vocational training for certain recognized professions. Schools for printers, agricultural schools, schools for textile weavers, are vocational schools if they have for their controlling purpose the training of persons who expect to make these occupations their business. Home making is a recognized occupation in this sense, regardless of how it may be viewed by the census, and schools that train girls actually to do household work, either as mistresses of homes or in domestic service, are strictly vocational schools.

The demand for the closer adaptation of education to life has developed quite independently of the vocational movement itself. It has made itself felt both in the city elementary school and in the one-teacher school in the open country. In schools like the experimental rural school at Winthrop College, South Carolina, for instance, the object is to build education from the very beginning on the activities of a farming community. Education is centered on the children's garden, and much training is given in agriculture, but the object is not so much to train scientific farmers and home makers as to reach the children by means of the things they know of and are interested in, with the hope that ultimately those of them who can will choose to remain in the country as producers on the land. An institution such as Hampton Normal and Industrial Institute combines elements of both types of education: The practical training is made the basis for academic work, and to that extent it is "education for life" rather than vocational training; at the same time the school makes a business of training teachers for service in negro schools as well as farmers; in the latter functions it is purely vocational.

The education-for-life movement is in part a scientific movement, derived from the psychological laboratory; in part a simple reaction from the academic to the practical, from the abstract to the concrete; in part it is also a social-welfare movement, gaining much force from settlement experience and the back-to-the-country call; only indirectly is it an economic movement. Industrial training, on the

other hand—vocational training for the trades and industries—is in the last analysis an economic movement. It was the manufacturers who first saw, in their own factories, the need for better-trained workers. They have realized for some years that it was neither provident nor possible to depend always upon the bountiful natural resources of the United States to offset lower-paid, but high-skilled, labor in other countries. They note Germany's successes in the world's markets, even in products where machinery has largely displaced individual craftsmanship, and they ask that the public schools provide training that shall furnish a constant fresh supply of workers for the trades and industries, instead of leaving this training entirely to chance. As an indication of the sincerity with which this plea is made, it is worth noting that many manufacturers have, at their own expense, introduced the type of training they know to be needed, and many competent observers consider the so-called corporation schools the best examples so far of real vocational training in the United States.

A speaker at a recent educational meeting[1] described the two types of education under the terms "way-in" and "way-out" education:

> If a State seriously proposes to do something definite for its youthful citizenship and for its industries by a comprehensive plan under some sort of a compulsory law, State wide in its application, I respectfully suggest that it develop two great divisions of the educative process; one which I will call the "way-in" education—an education practically common to all pupils; one dealing in the elements of citizenship; studies of language, history, geography; a training in the rudiments of arithmetic and elementary science; an appreciation of nature, music, and the decorative arts; a training of hand skill with its correlative development of mentality; this education to be given to pupils before they leave school at the age of 16, by the combined efforts of the home, the environment, and the schoolhouse.
>
> The other phase of education I would call the "way-out" education. It is specifically adapted to individual needs; vocational in a narrow sense, social in its broadest interpretation; given informally as well as formally through every social, educational, and civic agency whose good works in any way can contribute to that educative process which will make people, after they have gone to work, more contented, more efficient, more open-minded, and better citizens of an industrial democracy.

The two movements, each with its different history and development, seem to have come to a head in the United States at about the same time. Several of the States are endeavoring in their State plans to meet both demands. This is notably the case with Wisconsin and Indiana. Other States, like Massachusetts and New Jersey, are emphasizing for the present the directly vocational aim, without giving much attention to the prevocational and practical needs of the upper grades of the present elementary school, or the more gen-

[1] Arthur D. Dean, chief of division of vocational schools for New York State, at the meeting of the national society for the promotion of industrial education, Grand Rapids, Mich., October, 1913.

eral adaptation of elementary school work to the concrete things of life.

The effect of both movements, taken in conjunction with revised psychological ideas of child life, has been to call in question the whole accepted curriculum of the school. From a point of agreement on a settled group of subjects as the "fundamentals," many educators have come to a point where they accept no subject as of proved value; where they are certain of only one thing, that subjects as taught in most schools have little to do with real life; and that, whether the problem is to teach the same subjects differently or to start all over again with a new basis of operation, the present plan needs changing. Thus Prof. G. H. Meade declares:

> Our schools are still in one respect medieval. They assume more or less consciously that they are called upon to indoctrinate their pupils, and that the doctrine which they have to instill—whether it be that of language, number, history, literature, or elementary science—is guaranteed as subject matter for instruction by its own truth, its traditional position in the school curriculum, and finally by its relation to the rest of the ideas, points of view, artistic products, historic monuments, which together make up what we call our culture. * * * It follows, then, that when the results of the training are disappointing, the pedagogue feels that he is secure within his institution and can calmly pass the charge of inefficient training on to other social agents and conditions. * * *
>
> The medieval character of the school is shown in the separation of the institution, which has the doctrines of education intrusted to it, from the other training processes, in which the intellectual content is at a minimum and the practical facility is at a maximum. In a real sense the doctrine which the school inculcates should be continually tried out in the social experience of the child; there should be a play back and forth between formal training and the child's actual conduct.

For the present the "education for life" movement is directed mainly at the first six grades of the school system, whereas the vocational preparation itself is proposed for the seventh year and above. Events of the next few years may modify these lines of demarcation materially. The vocational guidance leaders, the social workers, the antichild-labor advocates, and most of those who have the best facilities for seeing the stream of young life as it goes from the tenement and the city street to the factory and the store are exerting pressure upon public opinion to raise the age limit of compulsory attendance to 16 years and beyond. Whatever action society takes in this matter will inevitably affect the point at which vocational education of the productional sort shall begin. In any event the demand is becoming more and more insistent that in the American democracy, a commonwealth where, in theory at least, to be a producer forms the first claim to citizenship, productional training shall be given to all children in the light of their aptitudes and needs and in the light of the requirements of society; and that such "consumptional" knowledge as may be taught shall furnish not only information that will cultivate the mind and make life more pleas-

urable, but shall be an efficient ally of production by inculcating economic consumption of those goods which the toil of humanity has produced.

EXTERNAL CHANGE.

The enlarged purpose of public education and the increasing emphasis on the vocational aim are making important changes in the external arrangement of education in the United States, significant indications of which are afforded by the year under review. The division into elementary, secondary, and higher education has lost much of its traditional meaning; and the successful effort of institutions in each of the accepted groups to raise standards only accentuates the modifications that are going on. Few publications merit so well the term "epoch-making" as the report of the National Education Association Committee on Economy of Time in Education, published during the year.[1] The conclusion of this committee, that at least two years can be saved in the time now given to elementary instruction, is significant, not because educators did not know it before, but because, coming from a conservative source, it represents the mature judgment of those actually engaged in teaching; a judgment, furthermore, reached only after the most painstaking consideration of all the circumstances, and confirmed by independent observers of conditions in other countries.

For years American practice has been peculiar in its insistence upon a nondifferentiated elementary school, usually of eight, but sometimes of seven or nine years. Foreign observers have repeatedly called attention to the weakness of this arrangement,[2] particularly because of its unfortunate postponement of maturer work. The change in educational opinion against the prevailing type has been brought about by a number of causes: Realization of the heavy loss of pupils from the sixth grade on; the imperative demand for vocational training to be given before the school loses control of the pupils who are most in need of it; the raised standards of higher education and professional training, together with unflattering comparisons of the product of the elementary schools in the United States with children of the same age in other countries, especially Germany and England. All of these have tended to concentrate attention on the "lost two years" in elementary education.

On this point public opinion is by no means as fully developed as the opinion of schoolmen. There is a tendency on the part of the community to cling to an arrangement that has little to commend it save its age. For this reason the changed structure of elementary and secondary education has frequently been accomplished without much ap-

[1] Bureau of Education, Bulletin, 1913, No. 38.

[2] See, for example, Kerschensteiner's opinion: Education bulletin, 1913, No. 24, p. 13.

parent alteration in the external arrangement. There are a number of devices for introducing secondary methods and differentiated courses in the seventh and eighth grades, which in effect lower the high-school line without making any too revolutionary change in existing institutions. This is, of course, only a passing phenomenon. The most direct plan, and the one most popular, appears to be the junior high school, consisting of the seventh, eighth, and ninth grades, followed by the three upper high-school years as a separate institution. States like New Jersey and Michigan, for instance, with a legal school establishment of 12 grades, the high school being officially merely a segregation of the upper grades of the scheme, find themselves in a much better position to accomplish external reorganization. Whatever method is adopted, the best educational sentiment of the country is now behind a plan to save at least two of the present eight years devoted to elementary schooling; and the coming year will see many additions to the list of communities where secondary or differentiated work is taken up at the age of 12 or 13 instead of 14 and 15.

This problem is intimately connected with that of the articulation of school and college. No public high school dares to take away from its pupils the opportunity of college preparation, regardless of how few expect to go on to college work. Experience shows that the door of opportunity is apt to remain closed to a large number of pupils when the college is in a position to dictate to the high school what subjects shall be presented for entrance, especially if the college is a private or only quasi public institution not responsive to popular demands. Many high schools, particularly those that have for years maintained a reputation for college preparatory work and guard that reputation jealously, hesitate to introduce the so-called vocational subjects or adapt their work more closely to the needs of the community, because the colleges to which their students aspire do not recognize such subjects for entrance. With the extension of State-supported education to include college and university, and with many endowed institutions assuming or claiming a State or national function, there is a marked tendency on the part of the colleges to meet the high schools half way and a disposition on the part of the schools to make the standard of vocational work high enough to warrant its acceptance in some part at least as evidence of intellectual accomplishment by the college.

At the upper end the problem presents peculiar difficulties, toward the solution of which less progress has been made. There is much confusion of function, due in part to the alternate developments of the English-college and German-university influence in American higher education, in part to varying local conditions. On the one hand is the inclination of the college and university more and more

to leave elementary instruction—in the modern languages, for example—to the high schools. On the other hand there is still a large group of institutions calling themselves colleges that do at most two years of what is usually accepted as college work—that is, in advance of a four-year high-school course. These colleges teach the elements of a variety of subjects. Without the equipment for scientific research, they may frequently be centers of real inspiration and culture, highly valuable to the community. What is to be their future? Sometimes they revert to the secondary school type; there are current instances of this, but it is not a popular move. Some observers profess to believe that the "college" is emerging—a distinct middle type between the high school and the university. Others believe that the number of colleges, like the number of professional schools, is destined to decrease materially, and that many of the institutions now calling themselves colleges will become special schools with definite vocational aims—a far more important, if less pretentious, function. The difficulty of achieving this kind of a change is obvious. The academic inertia complained of by the leaders in vocational education is often most noticeable in an institution of this type, and the change contemplated is almost too much of a right-about-face to be expected. The fact that many of these institutions are denominational in endowment, if not in aim, complicates the problem. Yet there are already some illustrious examples, in the South particularly, of what the old-line college can do by meeting the vocational needs of the community.

HEALTH SUPERVISION.

Rapid progress has been made during the past year in health supervision and health teaching in the public schools. Medical inspection, school nurse service, open-air schools, special classes for exceptional children—these have come to be recognized necessities in any public-school system, and the problem is no longer one of introduction, but of extension and organization. Few cities sufficiently organized to have a superintendent of schools are without the beginnings of a school health system. Free eyeglasses, free dental treatment, and the penny lunch are not quite so generally recognized, but a number of cities are introducing them into their schools.

The step from city to county or State has been made only in a few instances so far; it is the next step in progress. By combining to secure the services of a health officer, counties in some parts of the country are introducing medical inspection and the usual follow-up work that have already become effective in the cities. Several States now have plans in operation for State-wide health supervision of school children.

To a larger extent than heretofore the health movement appears to be working itself out through public educational agencies. With the recognition of the supreme importance of conservation of health and prevention of disease as compared with treatment has come also the realization that conservation and prevention can best be brought about by the early inculcation of proper habits of hygiene and sanitation in childhood. It is felt that public health is not only purchasable, but purchasable most economically in the public school.

A continued raising of the standards of medical education, evidenced by fewer but better medical schools; special preparation of teachers and leaders for public-health work, exemplified in the "school for health officers" of Massachusetts Institute of Technology and Harvard University and the introduction of the degree of doctor of public health in a number of American universities; large endowments for medical education, particularly in the field of research leading to prevention, as in the two notable benefactions of the year, those for Cornell and Johns Hopkins; marked activity on the part of State health authorities in utilizing educational agencies for the dissemination of health information—these are some of the indications of progress in health teaching for the year.

The health-conservation principle is emphasized still further in the play movement, which continues to develop vigorously. Larger school grounds in city and country, better evening recreational opportunities in school social centers, and supervised athletics for all children under wholesome conditions are a few of the important developments that show the increased influence of the play movement as a positive force in the advancement of public health.

RURAL EDUCATION.

The problem of rural education is a special problem, not because it ought to be, but because of differing development in city and country, and society's failure to provide equally. As a special problem, rural education is affected with particular force by most of the foregoing considerations. States with large rural population are seeking not only to make elementary education in the country more closely related to rural life, but also to provide vocational training in agriculture through rural high schools and elaborate extension systems, as well as in the existing agricultural colleges themselves. In one sense the fact that education in rural districts has remained backward is an advantage rather than a detriment for the present problem; there is no expensive machinery of education to be adjusted; there are fewer old-line schoolmen to be won over; there is somewhat less prejudice to be combated. In short, the country has an unsurpassed opportunity to build up an education that shall really provide a basis for a finer civilization; an education that may be intimately

connected with rural life and at the same time generous in its provision for vocational training.

Giving equal opportunities to the rural school is coming more and more to be considered an essential factor in educational reorganization. American complacency with regard to rural conditions has had many rude jolts during the past year or so, and is due for many more until the realization becomes general that lack of civilizing opportunities in the country districts means fewer people in the country, and fewer people in the country means higher and ever higher cost of living. The sequence is as inevitable as the duty is plain—State-provided education, with equal opportunities for every citizen of the State in city, village, or country.

The special lines of activity in the rural-school movement during the year have been: Further consolidation and centralization of schools in country districts; particular attention to the possibilities of the one-teacher school so that it may render maximum service wherever consolidation is impracticable; special preparation of teachers for rural-school work; extension of adequate supervision of rural schools under the county-unit plan; concentration of effort for rural betterment in local improvement associations, leagues, and similar organizations working through and with the school; definite State-wide provisions for lengthening the school term, paying better salaries, and in other ways increasing the importance of the teacher's position in the community.

EDUCATION FOR CITIZENSHIP.

"By far the greatest emphasis is given by our correspondents to moral training and preparation for citizenship," says the report on Economy of Time in Education, already referred to. The call for training in citizenship and morals represents another aspect of the education-for-life movement; it represents a demand for definite training in character that is felt to be lacking in the public school.

Education for citizenship is by no means a new demand, but it has acquired new force and new meaning recently. The original motive for establishing common schools was to produce good and useful citizens; and it is likewise true that all schools train for citizenship of some sort—good, bad, or indifferent. The present call is for a more practical and definite responsibility on the part of the school that its product shall be fitted for the exercise of citizenship in a country whose only defense is the civic intelligence of its citizens; that there shall be a better defined relation between instruction in the school and the business of actual citizenship in the larger world outside.

Direct training in citizenship as at present proposed and experimented with differs from the old course in civics in much the same way that the present-day conception of citizenship compares with

the older idea of a citizen's part in the community. Where the older civics taught mainly the bare machinery of government, the new citizenship training involves the ever-widening field of civic responsibility and interest corresponding to the aroused social conscience of to-day. Something of the spirit behind the current demand may be seen from the preliminary report of the commission on reorganization of secondary education of the National Education Association. According to the writer of the section on "Social studies," good citizenship is the end sought:

> Good citizenship should be the aim of social studies in the high school. While the administration and instruction throughout the school should contribute to the social welfare of the community, it is maintained that social studies have direct responsibility in this field. Facts, conditions, theories, and activities that do not contribute rather directly to the appreciation of methods of human betterment have no claim. Under this test the old civics, almost exclusively a study of government machinery, must give way to the new civics, a study of all manner of social efforts to improve mankind. It is not so important that the pupil know how the President is elected as that he shall understand the duties of the health officer in his community. The time formerly spent in the effort to understand the process of passing a law over the President's veto is now to be more profitably used in the observation of the vocational resources of the community.

In line with this emphasis the committee recommends that social studies in the high school shall include such topics as:

> Community health, housing and homes, pure food, public recreation, good roads, parcel post and postal savings, community education, poverty and the care of the poor, crime and reform, family income, savings banks and life insurance, human rights versus property rights, impulsive action of mobs, the selfish conservation of tradition, and public utilities.

There is general agreement that the school's plan for teaching citizenship shall include some form of student experimentation in government, to accord with the practical spirit that is behind the demand. This experimentation may take the form of the school republic,[1] as worked out some years ago in this country and more recently introduced into Alaska and among dependent peoples; or it may be in line with the practice school course in civics, where the pupils are led carefully, beginning in the fifth grade, by contact with the visible features of community government, through the commoner functions of organized community welfare to the main functions of larger units of society, without any self-government idea being necessarily involved.[2] In any case, the demand for citizenship instruction will mean the substitution of social science, or history taught from the social viewpoint, for the traditional history of the schools.

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[1] Wilson L. Gill: "A new citizenship. Democracy systematized for moral and civic training," Philadelphia, 1913.

[2] J. Linn Barnard: "A practice school course in civics," in National Municipal Review, vol. 1, No. 2, April, 1912.

It is not expected that school citizenship training will turn out "experts." No one cares to have it do that. What it will do is to turn out boys and girls with a basis for further civic knowledge. Armed with the essentials of the civic sciences they will be ready to assimilate more information; they will have a foundation for intelligent consideration of public questions; they will grow up to be better citizens.

It seems probable that education for citizenship will be one of the conspicuous features of the continuation school system, in whatever form this may be established in the United States. The experience of Germany shows that citizenship training acquires special force when given in conjunction with some sort of vocational training, or to students who are more mature than the average children in the schools. Modern training for citizenship tends to relate the worker and his work to the activities of society as a whole, and in so doing demonstrates the essential worthiness of any service, whether of hand or head, that contributes to society's fundamental necessities. Good citizenship involves a knowledge and appreciation of the peculiar value of each individual contribution to the doing of the world's tasks, and training to make this knowledge mutual is one of the real needs of democracy.

There is a larger aspect to the demand for education in citizenship that can not be answered by the introduction of this or that course. The teaching of good citizenship presupposes teachers who are themselves notable examples of good citizenship. The technique of citizenship may be imparted readily enough, but the spirit of good citizenship can only be taught by men or women who are themselves markedly proficient in the knowledge of civic and social obligation. As long as teaching in this country is as far from being a profession as it is to-day, the kind of teachers who are most needed can not be secured. The rural school teacher whose one ambition is to "advance" to a city job as quickly as possible is hardly the one to inspire her country pupils with the significance of rural civilization. The underpaid man teacher in the city, no matter how well-intentioned he may be, is not likely to prove an inspiring guide for future citizens in those virtues which are primarily the insignia of worthy citizenship. It is well to say, of course, that competent men and women will go into the occupation of teaching regardless of the money involved; but the economic demand is a primal one, and men can not and should not make a sacrifice that is not merely personal, but social; for the teacher who can not afford to marry, or, if married, can not afford to have children, is not the ideal exponent of citizenship. When the public once recognizes in practice as it does in theory the function of the school in preparing for citizenship, it will be more considerate of those whom it calls upon to prepare its children

for this highly delicate duty. It will see to it that teaching is made a profession, demanding adequate training and receiving commensurate reward; not a refuge for those who have nothing else in sight; it will provide that this profession, while by no means a money-making one, shall be one in which enough is paid to make the teacher independent of the petty worries that unfit him for the most important phases of his work.

MORAL TRAINING.

Just as a demand for citizenship training assumes a lack of connection between the school and the larger duties of life, so the demand for "moral training," in the sense of instruction in morals, takes for granted that the public school fails at the important point of relating its instruction to the problem of moral character. The traditional separation of church and state in the United States gives a certain superficial validity to the claim that the school makes no attempt to influence the morals of its pupils; and the existence of a vast machinery of denominational elementary, secondary, and higher education assuredly indicates that a considerable element in the population protests against education without explicit moral or religious foundation. The demand for a closer relation between the work of the school and the moral quality of its product is therefore voiced by many educators, some of whom believe that this relation can be produced by specific training in morals.

The whole question of deliberate training in morals is much debated. It can only be recorded for the purposes of this survey that current opinion seems to incline to the belief that, while the traditional separation of church and state in education has been entirely wise in the circumstances, it is possible that the pendulum has swung a little too far the other way in the United States; that anxiety to leave religion out of the schools may have also tended to exclude important moral influences from the schools. Thus, one writer notes that—

> the condition of public education in many places forbids the use of pictures which have been found by experience to be most uplifting. The only religion which the school officially teaches by its books, its pictures, and its statues, is that of Greece and Rome.[1]

Just what the school can do, more than it now does, to give direct instruction in morals is by no means a matter of agreement. One group, represented by the National Institute for Moral Instruction, Baltimore, Md., lays stress upon the so-called "visual method," whereby school children are shown stereopticon illustrations of real problems in boy and girl life. The lecturer interprets the pictures and discusses the problems presented. In this plan the teachers are

[1] Sneath and Hodges: "Moral training in school and home."

expected to follow up the formal lecture to see that the "visual instruction" makes a real impression in conduct.

Others depend upon textbooks. One such book, compiled for State use, differs from others by beginning frankly with business success or failure, and working from this to larger ideals of life and service.[1] In this book the plan of thought-provoking questions is carried out effectively. A section of the book contains material upon which the answers may be evolved, but plenty of opportunity is presented for individual initiative, both on the part of teacher and pupil. The theory of the book is that the boy or girl will have the questions discussed at home, with playmates, as well as in the schoolroom. Organized moral sentiment is thus developed about concrete problems concerning what to do and what not to do.

Several of the writers of the year are insisting that the instruction belongs chiefly in the home; and in any event, whether given at home or in school, that it must be chiefly indirect:

> We must avoid the formal, didactic method. We should introduce children to the virtues and vices, with their corresponding rewards and punishments, through fairy tale, myth, fable, allegory, parable, legend, stories of heroes and heroines, biography, and history. The child is easily brought into sympathy with the story, and grasps in this concrete and interesting way its moral import; and the lesson, because of the child's intense sympathies, soon sinks into his sensitive mind and receptive heart.[2]

This point is also emphasized by Prof. Dewey, who, in explaining why his study of the question considers moral principles in education, rather than education in morals, says:

> The distinction between "moral ideas" and "ideas about morality" explains for us a source of continual misunderstanding between teachers in the schools and critics of education outside of the schools. The latter look through the school programs and the school courses of study, and do not find any place set apart for instruction in ethics or for "moral teaching." Then they assert that the schools are doing nothing, or next to nothing, for character training; they become emphatic, even vehement, about the moral deficiences of public education. The school teachers, on the other hand, resent these criticisms as an injustice, and hold not only that they do "teach morals," but that they teach them every moment of the day, five days in a week.
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> In this contention the teachers are in principle in the right. If they are in the wrong, it is not because special methods are not set aside for what after all can only be teaching about morals, but because their own characters, or their school atmosphere and ideals, or their methods of teaching, or the subject matter which they teach, are not such in detail as to bring intellectual results into vital union with character, so that they become working forces in behavior. Without discussing, therefore, the limits or the value of so-called moral instruction (or better, instruction about morals) it may be laid down as fundamental that the influence of direct moral instruction even at its very best is comparatively small in amount and slight in influence, when the whole field of moral growth through education is taken into account.[3]

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[1] Sharpe, Frank C. Moral Training in High Schools. Bulletin of the University of Wisconsin.
[2] Sneath and Hodges. Moral Training in School and Home, p. 5.
[3] Dewey, John. Moral Principles in Education, p. 3. Houghton-Mifflin.

Here again, as with the problem of training for better citizenship, the school is face to face with the task of getting teachers who shall themselves exemplify the moral fiber that the schools are asked to bestow. After all, the most influential moral fact about the school is the presence of the teacher:

> The most valuable contribution which a good school can make to the equipment of a growing citizen is a point of view, a way of looking at things, a sense of values. And this, for good or ill, the teacher gives. It all depends upon the teacher's personality * * *. What is taught is learned, or not, according as these virtues prevail in the teacher's life. The most important part in the moralizing of the school is the moralizing of the teacher.

The demand for moral training acquires special force in view of the present widespread agitation of the sex-hygiene question. Those opposed to the introduction of sex hygiene in the public schools usually take the stand that what is needed is not information about the hygiene of sex or the dangers of venereal disease, but positive instruction in character and right living. Even those who favor sex instruction in the schools appreciate the importance of any moral training the school can give. Anything that will result in strengthened will power, in higher moral sense, or in any reenforcement of the power to discriminate in ethical values, is so much progress toward combating the abuse of the sex instinct. On the other hand, there is clearly some claim for sex instruction itself as of positive moral value, if properly given. The truth, told frankly and sympathetically by mother to child, ought to result in the kind of understanding that makes for character. Whether the same would be true of sex instruction in school is more of a question.

THE UNEVENNESS OF PROGRESS.

In any survey of current educational conditions in the United States the most striking and in some respects the most alarming feature is the lack of uniformity in educational progress. Some sections are just emerging from illiteracy, while others are providing their citizens with every possible educational advantage, from kindergarten to university. Within a few miles of the borders of a city with a magnificent school system, with palatial buildings, with trained teachers and supervisors, with elaborate library and technical equipment, with careful health supervision of its children, in short, with every conceivable educational opportunity, may be found the educational facilities of a backwoods civilization. For the most part there is no such thing as a State standard of education, not to speak of a national standard.

Again, it is American custom to think in terms of conspicuous achievements; to boast the gilded tip of the pyramid and forget the base of inferior metal. In many of the things that may be counted

as progress, American communities have but made a beginning. The danger is not in overvaluing the beginning, but in assuming that isolated examples of notably successful work atone for the large measure of omission. Few communities even approximate what educators are agreed to consider the fair demands of modern education. The conclusion of Prof. Hanus with regard to New York City, that in a number of important fields of education it offers little or nothing at all, is not to be construed as a special reflection on New York. It is merely a way of saying that most American cities, including the greatest of them, are still far behind what educational theorists have long thought should be done.

A still more disheartening fact is that this unevenness of progress is true, not merely of the newer things in education, but of the actual physical facilities for schooling of any kind. There are still whole States and divisions of States where the recognized protective principle of compulsory education is not yet in effect and where the struggle is not over the desirability of introducing this or that improvement, this or that health measure, this or that cultural or vocational opportunity, but where the whole duty of the State to teach its citizens how to read and write is the point fought for and not yet won. Of the thousand or more school laws passed last year, hardly more than one or two had any appreciable effect on this simple problem of getting the State's children into school. Similarly with regard to length of term. The vigorous campaign has, to be sure, resulted in lengthening of the school term, but the school of a few months' duration is still the prevailing rural type in too many States.

ORGANIZING FOR EFFICIENCY.

At the same time, the present year has seen increased activity on the part of National and State fact-producing agencies engaged in furthering educational progress, and much of this activity has resulted in strengthened opinion in respect to the obligation for State-provided education. Again, national agencies for betterment, both private and governmental, have seen their efforts supported splendidly by efficient local organizations of citizens. The school improvement leagues, the parent-teacher associations, the county improvement associations, and other local agencies supplementary to the school have proved to be a peculiarly valuable factor in arousing public opinion.

Not only inspiration is needed, but fact. There is urgent need for the fact basis in education to-day. It is futile to urge the extension of vocational training or vocational guidance until the fundamental facts about occupations are at hand. The social survey, the health survey, the educational inquiry—these should be the regular pro-

cedure, not the isolated instance, in American communities, whether city or country. The kind of survey of vocational opportunities, for example, that the Women's Municipal League of Boston made for that city should be made for every city and every country community. Every agency should be utilized that will first find out the needs of the community, compare them with the opportunities at hand, and then make both needs and opportunities so persistently heard that the public will be compelled to give heed. The survey itself is not only a way of finding out educational conditions; it is one of the best devices for concentrating public attention on education. No one expects New York to change its school system in toto to conform to the plans laid down by the members of the Hanus inquiry, but the product of that inquiry, in the form of expert educational information, is bound to have a stimulating effect on the thoughts of people with regard to schools and their work, not only in New York City, but throughout the Nation. The Ohio survey recently completed, with the educational congress that attended it, not only reveals a State organized to give equal educational opportunity to all, but demonstrates that the public only asks for sound information with respect to education in order to make a notable beginning in providing it.

To the important general influences affecting current educational progress must be added the efficiency movement in all its aspects. There is no field of education, public or private, that has not been powerfully, though often unconsciously, influenced by it, and apart from certain extreme applications, the effect has been thoroughly stimulating and wholesome. The efficiency principle, or, as it has almost become, the efficiency instinct, has caused educational leaders in school, college, and university alike to scrutinize with a new carefulness their expenditures of time, energy, and money; to analyze methods, teaching force, and subjects of curriculum with a clearer vision of social as well as economic cost and result; and above all, to see the educational problem as a single whole, whose closely related parts need to be repeatedly and systematically tested not only for themselves, but for the relation they bear to total community achievement.

CHAPTER II.

HIGHER EDUCATION.

By Kendric C. Babcock.

Specialist in Higher Education, Bureau of Education.[1]

Contents.—Agencies for standardization—State institutions—State aid for institutions under private control—Medical education—Investigations relating to higher institutions.

AGENCIES FOR STANDARDIZATION.

A survey of higher education in the United States for the year covered by this Report of the Commissioner of Education shows few new movements of great significance; nor does it reveal any especially noteworthy new results of combinations of old forces. On the other hand even a casual observer must be impressed by the notable acceleration of certain movements which have been commented on in earlier reports of the Bureau of Education. There are multiplying signs of fruitful self-examination on the part of institutions and leaders, and a willingness to make candid comparison with accepted standards, without any sense of compulsion toward a hard and fast uniformity. Publicity of facts ascertained by competent and impartial agencies, whose statements of these facts may sometimes be in contrast to the literature issued by officers or paid publicity agents, has become quite as much a factor in the betterment of conditions in higher education as the same sort of publicity has been in the betterment of the management and responsibilities of great corporations engaged in transportation and manufacturing.

Neither Federal Government nor State government, with the exception of New York, has or is likely soon to have any very large and effective control over the large number of independent or denominational colleges of the country; but as agents for ascertaining and publishing facts regarding institutions appealing to the public for financial support and for students, both Governments have important functions to perform. In the Western and Southern States the State universities are approximately of a common type, both in organization and in the standards toward which they are striving. Their achievements are bound to establish for their Commonwealths certain

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measures of equipment, of effective teaching, of social service, and of scholarship which will have a powerful reflex influence upon all other institutions within their States, quite regardless of questions of authority or control.

There is already a steady stream of students flowing from the smaller and independent colleges to the State universities, sometimes as undergraduates desiring to enter some technical or specialized course, in other cases as students who have graduated and who enter the graduate school, but more often as students who enter some one of the professional schools of the university. All this means that the State university must know very exactly, if possible, the character of the work done by these migrating students in their several institutions. The investigations thus necessitated, and their resulting knowledge, can not be confidential; record of them becomes in a large sense a public record, upon which the authorities of the State university are obliged to act. Such States, therefore, will practically have established by indirection if not by intention an authoritative evaluation of the work of their various institutions. Just as the evaluation or accrediting of the secondary schools of a State by the State university is accepted and recognized in other States and by other institutions, so it may reasonably be expected that these results of careful, judicious, broadminded, sympathetic evaluation of the work of colleges will be accepted and made a basis of action by many institutions outside the State immediately concerned. Whatever irritation or sharp difference of judgment may now and then arise through the unwillingness of a university to accept an institution's estimate of itself and its works, only good can come to the cause of higher education as a whole from such evaluation and presentation of the truth. But not all State university officers and committees will have the same standards of judgment; not all will find themselves at all times in perfect freedom to investigate and to pronounce an opinion; in some cases prejudice or jealousy or unfair ambition will be charged against the State university. The significance of a movement for coordination of these judgments, which has already been inaugurated, deserves particular attention.

One of the great inter-State or sectional organizations which has hitherto concerned itself chiefly with one-half of the work suggested by its name has enlarged its efforts in highly suggestive fashion. The North Central Association of Colleges and Secondary Schools has confined its activities in the main to the problems of the secondary school and its relations to the college. Though the fourth article of the constitution of the association expressly states that, "All the decisions of the association bearing upon the policy and management of higher and secondary institutions are understood to be advisory in their character," it has been a very potent factor, through its commission on accredited schools and its published list of such schools

in the 16 States represented in its membership, in elevating the standards of secondary education. By the third article of this constitution, only those universities, colleges, or junior colleges are eligible for membership which require for admission 15 units of secondary work, and no secondary school is eligible which does not provide these 15 units. Since 1910 this article has also included this provision: "After April 1, 1912, no college or university shall be eligible to membership which is not on the list of accredited colleges of the association." But the making of this list proved to be a matter requiring patience, tact, and courage, and it was not until March, 1913, that the commission was able to present such a list to the association for its adoption.

The importance of this step can not easily be overestimated, especially if it be borne in mind that this is a voluntary association already containing a large number of institutions certain to be affected by this action. The adoption of the report of the commission fixed certain standards for colleges and universities and established a list of accredited colleges as prescribed in the constitution of the association. This list included 73 institutions; 2 of these are junior colleges, and 7 are institutions already members of the association, continued as such, and placed upon the approved list for one year with an asterisk before their names indicating that they conform to the standards set by the association except the standard referring to endowment. The distribution of the institutions thus listed is as follows: Ohio, 17; Michigan, 2; Indiana, 4; Illinois, 13; Wisconsin, 6; Minnesota, 3; Iowa, 10; Missouri, 5; Nebraska, 2; Kansas, 4; Colorado, 1; Oklahoma, 1; South Dakota, 2; North Dakota, 2; Kentucky, 1. Five teachers' colleges and normal schools are placed in an unclassified list for the year 1913–14.

The main sections of this important report, and the statement of the standards in accordance with which the commission proceeded in estimating the standing of institutions after receiving the returns from a carefully prepared questionnaire, are here presented as they were adopted on March 21, 1913:

REPORT OF THE SECRETARY OF THE COMMISSION TO THE ASSOCIATION, PRESENTED MARCH 21, 1913.

The commission recommends that college standard No. 2 be amended. This standard now reads as follows: "The college shall require for admission not less than 14 secondary units as defined by this association." It is recommended that this standard be amended by the addition of the statement, "After September, 1915, no institution shall be approved which admits any conditioned students with less than 14 units."

The commission reports that the officers were authorized to warn those colleges on the approved list whose practices depart in their judgment in any measure from the standards.

The commission reports that the officers were authorized to follow up the information now in hand by inquiring into the records of students who have gone into graduate and professional study from colleges on the accepted list.

The commission reports that the cases of normal colleges and normal schools now on the membership list of the association were laid on the table for one year; and the officers were directed to prepare and present a report at the next annual meeting dealing with the matter of an approved list of such institutions.

The commission reports that two junior colleges were accepted for the approved list with the statement added to the names of these institutions that they are junior colleges.

The commission reports that the officers were authorized to use the information collected on the blanks for the publication of a general report discussing the organization and practice of colleges in this territory.

The commission reports favorable action on the following resolution: That the colleges now members of the association, which have the approval of the committee in every respect except that of endowment, be retained with a star stating this fact, and be allowed one year in which to bring up the endowment deficiency.

The commission reports that it ordered the normal colleges and normal schools now members of the association to be retained on an unclassified list for one year.

UNAMENDED STANDARDS FOR COLLEGES AND UNIVERSITIES.

Standards of Accrediting Colleges and Universities.

The standard American college is a college with a four-year curriculum with a tendency to differentiate its parts in such a way that the first two years are a continuation of, and a supplement to, the work of secondary instruction as given in the high school, while the last two years are shaped more or less distinctly in the direction of special, professional, or university instruction.

The following constitute the standards for accrediting colleges for the present year:

1. The minimum scholastic requirement of all college teachers shall be equivalent to graduation from a college belonging to this association, and graduate work equal at least to that required for a master's degree. Graduate study and training in research equivalent to that required for the Ph. D. degree are urgently recommended, but the teacher's success is to be determined by the efficiency of his teaching, as well as by his research work.

2. The college shall require for admission not less than 14 secondary units, as defined by this association.

3. The college shall require not less than 120 semester hours for graduation.

4. The college shall be provided with library and laboratory equipment sufficient to develop fully and illustrate each course announced.

5. The college, if a corporate institution, shall possess a productive endowment of not less than $200.000.

6. The college, if a tax-supported institution, shall receive an annual income of not less than $100,000.

7. The college shall maintain at least eight distinct departments in liberal arts, each with at least one professor giving full time to the college work in that department.

8. The location and construction of the buildings, the lighting, heating, and ventilation of the rooms, the nature of the laboratories, corridors, closets, water supply, school furniture, apparatus, and methods of cleaning shall be such as to insure hygienic conditions for both students and teachers.

9. The number of hours of work given by each teacher will vary in the different departments. To determine this, the amount of preparation required for the class and the time needed for study to keep abreast of the subject, together with the num-

ber of students, must be taken into account; but in no case shall more than 18 hours per week be required, 15 being recommended as a maximum.

10. The college must be able to prepare its graduates to enter recognized graduate schools as candidates for advanced degrees.

11. The college should limit the number of students in a recitation or laboratory class to 30.

12. The character of the curriculum, the efficiency of instruction, the scientific spirit, the standard for regular degrees, the conservatism in granting honorary degrees, and the tone of the institution shall also be factors in determining eligibility.

No institution shall be accredited or retained on the accredited list, unless a regular blank has been filed with the commission, and is filed triennially, unless the inspectors have waived the presentation of the triennial blank.

STATE INSTITUTIONS.

One group of notable changes in the field of higher education during the year covered by this report relates to institutions supported more or less completely by the State and governed by conditions for which the States themselves are responsible. Here there has been no slackening in the steady development of generous support of State educational institutions of all kinds—universities, colleges, professional schools, technological schools, normal schools, and secondary schools.

In each of three States the biennial appropriation made by the legislature of 1913 for the support of the State universities has passed $3,000,000, and in the case of the University of Illinois the appropriation from the fund created by the mill tax and exclusive of revenue from Federal land grants, student fees, etc., reached the astonishing total of $4,500,000 for maintenance, improvements, and land purchases. The total biennial appropriation for the University of Wisconsin was $4,130,440; for the University of California approximately $3,900,000. In the last two cases the appropriations were from current State revenues, and by no means indicate the total revenue of the institutions mentioned.

In the Annual Report for 1912 considerable space was devoted to the experiment of a central board for several of the higher educational institutions in a given State. The legislative period just closed produced new central boards in Kansas and Idaho. Vermont created a commission composed in part of prominent university and business men outside the State for the purpose of reporting upon a unification of the State-supported institutions and coordination of their work with one or more of the private institutions.

In Oregon further progress has been made in correlation of work of the University of Oregon and the Oregon Agricultural College. In Iowa the plan of the State board of education for defining and delimiting more clearly than heretofore the functions of the three great institutions in its charge aroused vigorous and vehement opposition from the alumni and supporters of the institutions; and the legislature devoted a good deal of its time to this particular matter. The result

was the abandonment by the board of the proposed rearrangement and reorganization of the higher educational work of the State, and a practical continuance of the conditions which the board thought to improve through its proposals.

STATE AID FOR INSTITUTIONS UNDER PRIVATE CONTROL.

In the middle region or twilight zone between institutions which are wholly controlled by the State and institutions which are controlled by private corporations, certain developments should be noted which are in the nature of an enlargement of old processes rather than the inauguration of new plans of educational organization and support. Variations from the strict observation of the principle of separating completely state and church are here and there observable: (1) Through appropriations for the support of charitable institutions conducted in the interests of, or in close affiliation with, some religious denomination; (2) through appropriations for hospitals and medical schools connected with private denominational colleges; and (3) through appropriations for special schools in connection with institutions not otherwise related to the State or to public education.

The State of New York has for many years made large appropriations to the New York State College of Agriculture, which is a college of Cornell University. No small part of the prestige and service of Cornell University has come to it through this State support, and the university is so far recognized as the State University of New York that it is accorded membership in the National Association of State Universities; but the control of the money appropriations by the State to this college is lodged in the hands of the board of trustees of Cornell University, a body in which the State has a large, but not a dominating representation. In the total membership of 40, the State representatives comprise only 30 per cent, made up of the governor and six other State officials serving ex officio, and five members appointed by the governor.

In 1913 the Legislature of New York appropriated, aside from the interest on the college land-scrip fund ($34,428.80), for the maintenance, equipment, and necessary materials to conduct the "State College of Agriculture at Cornell University," $450,000, and to the State Veterinary College at Cornell University, $65,000.

Since 1900 New York has also made appropriations annually for the New York School of Clay-Working and Ceramics, at Alfred University. Its buildings are adjacent to the university campus, and its affairs are administered by the trustees of the university. The appropriation in 1913 amounted to $16,000. In 1908 the State provided further for the establishment of a State School of Agriculture at this university, which is governed by a board of managers appointed by the trustees of Alfred University, together with the State

commissioner of agriculture and the director of the State college of agriculture. The appropriation for this school in 1913 was $35,000.

In somewhat similar manner the State made an appropriation of $35,000 for the New York State School of Agriculture at St. Lawrence University, and another of $50,000 for the State College of Forestry at Syracuse University, "for administration, instruction * * * experimental and extension work through the State, etc." The board of trustees of this college of forestry consists of the chancellor of Syracuse University and the State commissioner of education, ex officio, three members appointed by the governor, and six members (a clear majority) chosen by the university from its own trustees. Thus it is obvious that the control of the State appropriation is left, in final analysis, in the hands of a board of trustees composed of 23 trustees at large, 6 alumni trustees, and 28 conference trustees chosen by various conferences of the Methodist Episcopal Church.

The legislature of 1913 went one step further than its predecessors toward larger indirect aid to institutions over which the State exercises only a general supervision. This law is an act "relative to the establishment of scholarships for the aid of students in colleges." It establishes five State scholarships, to be maintained by the State, and to be "awarded each county annually for each assembly district therein;" each scholarship entitles the holder to $100 "for each year which he is in attendance upon an approved college in this State during a period of four years, *to be paid to or for the benefit of such holder* as hereinafter provided, out of a fund which is hereinafter created." The award is to be made by the commissioner of education, from a competitive list, according to rules made by the regents of the University of the State of New York governing, among other things, "the colleges which they (the scholars) shall attend." These rules may also "prescribe conditions under which payments may be made direct to the college attended by the person named in such certificate, in behalf and for the benefit of such person." The act limits the number of scholarships to 20 for each assembly district, and to 3,000 for the entire State, involving a possible maximum expense of $300,000 annually. It excludes purely professional students from its privileges.

The State of Massachusetts makes large appropriations for the Massachusetts Agricultural College under its control, but also lends its support to both the Massachusetts Institute of Technology and the Worcester Polytechnic Institute, neither of which is in any sense a State-controlled institution, though the governor, chief justice, and commissioner of education sit as "Representatives of the Commonwealth" with the 49 life members and term members of the corporation of the Massachusetts Institute of Technology. The latter institution has long sustained much the same relation to the State

that Cornell University does to New York in that it has shared, as an institution devoted to "the mechanic arts," in the apportionment of the Federal land-grant funds. More recently both the Boston and Worcester institutions have received large continuing appropriations from the State treasury "to be expended under the direction of the corporation of said institute for the general purposes of the institution." For the year 1912 the annual appropriation to the Massachusetts Institute of Technology was $100,000, in consideration of giving 80 free scholarships, or 2 to each senatorial district, with the proviso that the appropriation for 1917 and the four following years should be withheld if the institute had not by that date received additional gifts of $1,000,000. In the case of Worcester Polytechnic Institute the subsidy was $50,000, in consideration of 40 scholarships, with a similar proviso for raising $350,000 before 1917. The records do not show that any grants have been made to Boston University for training for business, or to Simmons College for training for women's vocations and professions, or to Boston College, or to Tufts College, each of which is performing in its own way very useful service to the Commonwealth, comparable with that of the two great technological institutions just discussed.

The State of Vermont in 1912 voted $12,000 to Middlebury College to be "expended by such institution in providing instruction in subjects essential for students preparing to teach in Vermont high schools and academies," and in maintaining 30 scholarships of $80 each. Norwich University similarly received $20,000 for its general use, in consideration of maintaining scholarships and submitting to an examination by a board of visitors consisting of two State officers and three appointees of the governor. The University of Vermont and State Agricultural College is in receipt of about $26,000 annually from the State, but so far as the university proper is concerned it is no more a State university than Cornell University, save that the board of trustees consists of the governor and the president of the university, ex officio, nine members "on the part of the University of Vermont," and nine members "on the part of the State Agricultural College."

New Hampshire, like Vermont, subsidizes a privately controlled college through the grants to Dartmouth College, though it has four official members and five "councillors" who are "ex officio trustees of the college in relation to funds given by the State of New Hampshire," in addition to the 11 regular "trustees of Dartmouth College and of Moor's Charity School." To its own New Hampshire College of Agriculture and Mechanic Arts the State gives annually about $21,000.

New Jersey has combined its land-grant college with Rutgers College, having declared in 1864 "The trustees of Rutgers College in New Jersey, maintaining Rutgers Scientific School," to be "The State College for the Benefit of Agriculture and the Mechanic Arts." The

board of trustees of the college is supplemented by a board of visitors of the State college, consisting of two members from each congressional district in the State. For 1912 the State voted about $65,000 for support of the college.

Pennsylvania and Maryland have for many years made large appropriations to various private schools and colleges, but it is worthy of note in this connection that in both of these States are discernible signs of a distinct reaction against the policy under discussion. At least one of the State boards of Maryland is making a careful survey of the support given by the State to educational and charitable institutions under the guise of scholarships.

During the session of 1913 of the Pennsylvania Legislature bills were introduced calling for appropriations to a number of institutions. Among these was a bill which passed the senate appropriating $60,000 to Washington and Jefferson College, which was at that time engaged in a campaign to increase its endowment by half a million dollars. The bill was introduced without the knowledge of the college authorities. The board of trustees of the college felt that it would be inconsistent to accept such an appropriation after appeals had been made to persons on the ground that the college was not seeking State appropriations. Accordingly, the board passed the following resolution, which resulted in the withdrawal of the bill:

Resolved by the executive board of trustees of Washington College, That in the opinion of this committee the State should not appropriate money to educational institutions not under direct State control, and therefore the Legislature of Pennsylvania should not be asked to pass the bills now pending making an appropriation to this college.

In view of the fact that the bill for aiding this college had passed one house of the legislature, with every prospect of passing the other house, the reasons for the action of the college as stated by one of the college officials have peculiar pertinence to this discussion.

The college was not always opposed to State aid. Several small appropriations to the two institutions out of which the present college grew had been made during the first 50 or 60 years of their existence; but since 1865, when they were united, no appropriation has been made. Moreover, it seemed to us from the constitution of the State adopted in 1873 that it was then determined that appropriations should not be made to any institutions not under direct State control, except in very peculiar circumstances, and then only by a two-thirds vote of the legislature. This principle, however, seems to have dropped out of sight, and appropriations to a few institutions have been made in increasing amounts according to the amount of political influence they could exercise, while many other institutions equally deserving are left to struggle to secure private gifts.

The State of Rhode Island, through its legislature, has entered into cooperation with Brown University for the professional education of college graduates desiring to prepare for positions as high-school teachers or principals. Part of the sum appropriated is to be used in

carrying on graduate instruction and part for the maintenance of scholarships.

The recent progress of Peabody Normal College, which resulted in the George Peabody College for Teachers in Nashville, Tenn., illustrates the unusual combination of private benevolence, municipal appropriation, and State appropriation. The control of the property and the details of the institution are left, however, entirely in the hands of a self-perpetuating board of trustees.

MEDICAL EDUCATION.

No single feature of improvement in higher education in the last seven years better deserves reiterated emphasis and approval than the progress in medical education. The changes of the last year give renewed cause for satisfaction. The continued decrease in the number of medical schools, from 162 in 1906 to 106 in 1913, is fresh evidence of sound appreciation of the vital necessity of most thorough, exacting, and scientific training in laboratories and actual, practical apprenticeship under expert direction in large hospitals.

By the action of the Council on Medical Education of the American Medical Association, acting in cooperation with the Association of American Medical Colleges, a new milestone in the progress of medical education was established in the spring of 1913. Step by step the curriculum of a standard medical school has been extended to cover four years; admission has advanced from the modest requirement of the completion of high-school education to requirement of a preliminary college year, which should include at least physics, chemistry, and biology. Forty-three medical colleges at the close of the period covered by this report were enforcing at least this requirement; others have announced that it will go into effect in 1913; still others have signified their intention to put it into operation in 1914. By these schedules there should be after January, 1914, 71 medical colleges requiring for entrance one year of college work, including courses in physics, chemistry, biology, and a modern language. But this is not the whole story. Thirty of them, including those which require a bachelor's degree for admission, now demand two years of work in a college of liberal arts, in addition to a high-school course covering four years, and nine have announced the adoption of the two-year collegiate requirement, to become effective before the end of 1915.

The Council on Medical Education, by its announcement of the basis on which medical colleges will be rated in the council's classification as "Class A+, acceptable medical colleges," and "Class A, colleges lacking in certain respects, but otherwise acceptable," has fixed and defined this new or collegiate requirement of a single year (see the Journal of the American Medical Association, vol. 61, pp. 582

to 589, Aug. 23, 1913). This requirement for admission becomes effective on and after January 1, 1914. The Association of Medical Colleges expresses its requirement in slightly different terms—"one year each of physics, chemistry, and biology of college grade, each not less than eight hours." While these two associations have no legal authority to compel the acceptance of their standards, the value of the recognition accorded to an institution by placing it in Class A+ or Class A is so great that ambitious institutions can not afford to defer compliance longer than is absolutely necessary. It should be noted in this connection that the information upon which classification by the council is made or admission to the Association of Medical Colleges accomplished is based upon the direct personal examination of the work of institutions listed by an agent or by a committee of these two organizations. The rating, therefore, is not a paper-made affair, but one which commends itself because of its thoroughness and because it is continually kept up to date by visitation, conference, and correspondence.

Confronted by the enormously increased cost of maintaining a first-class medical school, the movement to surrender medical education to the State university or to put it under the care of the State has gone on apace during the year under discussion. The medical college of Drake University, Des Moines, Iowa, was transferred by a cordially amicable arrangement to the State University of Iowa; the medical college of Willamette University, Salem, Oreg., has been discontinued, and all medical education in Oregon will be carried on by the University of Oregon, in Portland. The State of South Carolina has adopted and made appropriations for the Medical College of the State of South Carolina, located at Charleston. An agreement has been perfected by which the University of Alabama will take over the Birmingham Medical College and make of it the postgraduate department of the university's medical school. The College of Physicians and Surgeons, of Chicago, which has had an intermittent affiliation with the University of Illinois, without receiving any State aid, however, has recently turned over all its property to the university and gone out of existence as a separate corporation. State aid, which was once defeated by the veto of the governor and once by a decision of the supreme court of the State, seems now assured. The two medical schools in Richmond, Va., the Medical College of Virginia, which has received a small subsidy from the State, and University College of Medicine, which must not be confused with the medical school connected with the University of Virginia, at Charlottesville, have united as the result of long negotiations.

The financial resources of the medical schools have shown gratifying increases. State appropriations have been generous both for maintenance and for buildings, while gifts running into the millions for hos-

pitals, for instruction, and for endowment of research fill the record of the year. The campaign of the Western Reserve University, of Cleveland, in the past two years resulted in a total of $1,533,000 of endowment for the medical department of that institution. During the past year the University of California received an aggregate of nearly $480,000 toward a total of $600,000 for a teaching hospital, and the George William Hooper Medical Endowment, consisting of property valued at considerably more than $1,000,000, perhaps ultimately $2,000,000, for purposes of medical research.

INVESTIGATIONS RELATING TO HIGHER INSTITUTIONS.

Provisions for an educational investigation and research in relation to the organization and management of higher institutions have been made in various forms. Some of these apply to single States only, and relate primarily to State-supported institutions; others have no limitation upon their scope or area of investigation. In the former class should be placed the commission provided for by the act of the legislature of Vermont, November 19, 1912, creating an unpaid commission of nine persons, "at least two of whom shall be expert in, or engaged in educational work, whose duty shall be to inquire into the entire educational system and condition of the State," and to report on the rights, duties, and obligations of the University of Vermont, and State Agricultural College, Middlebury College, and Norwich University, with such recommendations as will prevent unnecessary duplication and consequent loss from waste. This commission, when created, included not merely men of prominence within the State, but men prominent in the business world and in educational circles; for example, the president of the American Telephone and Telegraph Co., and the president of Columbia University. This commission, furthermore, proceeded with a thoroughness and breadth of plan unusual in the history of commissions. It drafted into its service experts connected with the Carnegie Foundation for Advancement of Teaching, and with the Teachers College of New York City.

The State of Texas is receiving the benefits of the services of an "organization for the enlargement by the State of Texas of its institutions of higher education." This organization is backed by a subscription by the alumni and friends of the university amounting to approximately $30,000 per year for a period of five years. It has employed a secretary for research, and has already published several documents dealing with the organization and administration of State-supported institutions, with special reference to the State of Texas. One of its aims is to secure for all the State's higher educational institutions an adequate permanent revenue.

A distinct endowment for educational research, to be conducted on the highest possible level, has been provided for by the addition of $1,250,000 to the funds of the Carnegie Foundation for the Advancement of Teaching. This sum is to be specifically devoted to educational research and to the work which has already been undertaken in investigation of legal education somewhat along the lines of its report on "Medical Education in the University." This gift assures a permanent income of sufficient amount to enable the foundation to carry on with thoroughness and deliberation almost any investigation which it may determine upon. It is not easy to decide whether the obligation, the opportunity, or the promise presented by this endowment should be counted its most fortunate feature.

Among the voluntary organizations which are carrying on vigorous investigations of single groups of institutions, prominence should be given to the Southern Association of College Women. For several years an annual report has been presented upon the organization standards and practices of colleges for women in the Southern States. The latest presentation of this subject appears under the title, "Improvement of the College since 1900," presented in the proceedings of the tenth annual meeting of the association in April, 1913.

CHAPTER III.

PROGRESS IN MEDICAL EDUCATION.

By N. P. Colwell, M. D.

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Contents.—Some agencies working for improvement—The recent campaign for improvement—Fewer but better colleges—Admission requirements of medical colleges—The standard outlined—Colleges and States having higher entrance requirements—Requirements by State licensing boards—Other improvements in medical colleges—Full-time expert teachers in medical schools—Medical research—Research in medical schools—Increased clinical facilities—Cost of teaching medicine—Endowments for medical education—The hospital-interne year—Postgraduate medical instruction—Graduate courses in public health—Tropical medicine—Hindrances to progress—Conclusion.

The progress made in medical education during the past eight or nine years has probably not been fully appreciated except by those directly connected with medical colleges or with universities having medical departments. During the 30 years prior to 1904, in all parts of the country there sprang up all manner of medical colleges, most of them being stock corporations conducted chiefly for the profits there were in them directly or indirectly for the stockholders, who were usually the "professors." The rapid development of the country, the pushing of the frontier westward, and the springing up of new towns and cities created a great demand for doctors, so that medical schools became very profitable enterprises. The supply, however, soon far exceeded the demand, so that in 1904 the United States had nearly one-half of the world's supply of medical schools, the total in that year being 161, not including about 15 colleges teaching the so-called "drugless methods" of treating human ailments. Schools of the latter class have never developed to an equal extent in foreign countries, which have always kept medical education in the control of the universities. During this 30-year period there were some medical schools which were integral parts of well-conducted universities, and in the latter part of this period a few which compared favorably with any medical school abroad. On the whole, however, fair educational standards were missing or were disregarded, laboratories were few or entirely lacking, and clinical facilities varied from a fully adequate quantity in some schools to a total absence of them in others.

SOME AGENCIES WORKING FOR IMPROVEMENT.

During this period also there sprang up in all sections of the country a large number of "diploma mills," which peddled diplomas for a consideration without any attempt to furnish medical training. Most of these were discovered and forced to close, largely through the efforts of one man, to whom medical education and the public are deeply indebted, Dr. John H. Rauch, who during the period from about 1878 to 1891 was secretary of the Illinois State Board of Health. Dr. Rauch during his official career collected voluminous statistics regarding medical colleges, students and graduates, and medical laws, which constitute the most reliable information existing about these matters during that period. It was chiefly through the facts collected by Dr. Rauch, and the publicity given to them, that medical schools extended their requirements for graduation from two to three annual sessions. The influence of his work was not limited to Illinois, but was felt throughout the entire country. His work pointed to the necessity of a strong national influence for the attainment of desirable and reasonable standards of preliminary and medical education. The Association of American Medical Colleges was exerting considerable influence in fixing standards, although unfortunately that influence was limited to the colleges in membership. The American Medical Association, representing the organized medical profession of this country, was organized in 1846 for the express purpose of improving medical education, but its really effective work in that direction did not begin until in 1900, when the Journal of that organization, under the able editorship of Dr. George H. Simmons, began publishing annually statistics regarding medical colleges, students, and graduates. In 1903, also under Dr. Simmons's direction, was begun the annual publication of statistics showing the successes and failures of medical school graduates at the various State license examinations.

THE RECENT CAMPAIGN FOR IMPROVEMENT.

As will be noted in the accompanying chart, the number of medical colleges continued near the maximum until 1904, when the House of Delegates, the governing body of the American Medical Association, created a permanent committee, the Council on Medical Education.[1] The function of this council was to collect and publish reliable infor-

[1] This committee was made up of the chairman, Dr. Arthur Dean Bevan, professor of surgery, Rush Medical College, Chicago; Dr. Victor C. Vaughan, professor of hygiene and physiological chemistry, University of Michigan, department of medicine and surgery, Ann Arbor; Dr. Charles H. Frazier, professor of surgery, University of Pennsylvania, department of medicine, Philadelphia; Dr. J. A. Witherspoon, professor of medicine, Vanderbilt University, medical department, Nashville; and Dr. W. T. Councilman, professor of pathology, Harvard University Medical School, Boston.

CHART 1.—MEDICAL COLLEGES IN THE UNITED STATES.

	1770	1780	1790	1800	1810	1820	1830	1840	1850	1860	1870	1880	1890	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Total No. colleges	2	1	2	4	6	12	21	33	52	65	75	100	133	160	160	160	160	160	158	162	159	151	140	131	122	118	106	77
No. requiring college work for entrance														2	3	3	3	4	5	6	9	16	24	40	42	45	52	77

Shaded bands show total number of colleges existing in the year given; solid bands show number of colleges in the year mentioned which required one or more years of collegiate work for admission. By 1914, according to statements published in their announcements, 77 medical schools will have adopted this higher requirement.

mation regarding medical education, and to do what it could to secure the adoption of better educational standards. With the organization of this permanent committee a vigorous campaign of improvement was initiated. The statistical work begun by the association's Journal was naturally placed in charge of this committee. An "ideal standard" of preliminary and medical education was drawn up; an effort was made to correlate the work of the several agencies working for better educational standards; annual educational conferences were held at which representatives of State licensing boards, deans of medical colleges, university presidents, and others interested were invited, and at these conferences a full discussion was given to standards and problems of medical education. The first three years were devoted chiefly to a careful investigation of the conditions in the medical schools of the United States, and in 1906 a personal inspection was made of each of the 162 medical colleges then existing. In 1907 the first classification of medical colleges, based on the council's investigations, was presented at the third annual conference and was included in the council's annual report to the American Medical Association. That classification was not published, but each college was notified of the rating given to it.

From the beginning of its work the council particularly urged the adoption of higher entrance standards, in order that a better quality of students might be enrolled. In cities where two or more medical colleges existed mergers were advised, in order that there might be in each instance one stronger and better-equipped college. A rapid and voluntary improvement by the medical colleges was begun with an enthusiasm which was as surprising as it was encouraging. The results have by far surpassed the highest expectations of those who started the campaign. That the improvements by the colleges have been so largely voluntary is the best guaranty that they are permanent. It is interesting to note that the marked diminution in the number of medical colleges began in 1907, following the appearance of the council's first classification.

Two other complete tours of inspection have since been completed by the council, and on the basis of the conditions found two subsequent classifications of the medical colleges have been prepared, and both of these were published. The second classification was published in 1910, simultaneously with the appearance of the report on Medical Education in the United States and Canada made by the Carnegie Foundation for the Advancement of Teaching. The third classification was published in January of the present year.[2]

[2] Journal of the American Medical Association, Jan. 18, 1913, pp. 231–234, and (revised) Aug. 23, 1913, pp. 585–587.

In 1907 a list of foreign medical colleges was compiled by the council, which revealed the astounding fact that, of all the medical colleges in the world, this country had nearly one-half. Since 1906, however, as will be noticed in the chart, the number has been reduced from 162 to 106, the latter number approaching more nearly the normal supply for this country. As may be noted in Table 1, since 1904 there have been 79 colleges closed. Of this number 47 were closed by merger with other institutions, while 32—all but 2 having been rated in class C by the council—became extinct. That the total is still too large, however, is quite evident, since a score or more still

TABLE 1.—*Colleges closed since 1904.*

Year.	Class A.[1]		Class B.		Class C.		Total.		Total closed.
	Merged.	Extinct.	Merged.	Extinct.	Merged.	Extinct.	Merged.	Extinct.	
1905	8	1					8	1	9
1906									
1907	3		3	1		3	6	4	10
1908	2		2		1	4	5	4	9
1909	3		2			7	5	7	12
1910	1		3		3	6	7	6	13
1911			3		1	3	4	3	7
1912	2					3	2	3	5
1913	3		6	1	1	3	10	4	14
Total	22	1	19	2	6	29	47	32	79

[1] Based on the classifications of med ical colleges prepared by the Council on Medical Education.

continue to exist through the use of skillfully worded, self-laudatory, or even misleading advertisements, and by an evasion of even the minimum legal standards for admission. Such colleges will continue to exist just so long as State boards or ineffective medical-practice acts will continue to tolerate them. That the time may not be long, however, is evident from the fact that according to official statements received from the following 25 State licensing boards, diplomas from these inferior colleges are not recognized as an acceptable qualification for a license to practice medicine in those States:

TABLE 2.—*State boards not recognizing low-grade colleges.*

Alabama.	Maryland.	Pennsylvania.
Arkansas.	Michigan.	Rhode Island.
Colorado.	Minnesota.	Texas.
Connecticut.	Mississippi.	Vermont.
Delaware.	New Hampshire.	Virginia.
Indiana.	New Jersey.	West Virginia.
Iowa.	New Mexico.	Wisconsin.
Kentucky.	North Dakota.	
Louisiana.	Ohio.	

Unless the other State boards adopt effective safeguards they are apt to become the dumping ground for the illiterate, poorly trained output of these low-grade colleges.

FEWER BUT BETTER COLLEGES.

Although in the total number of medical colleges in the United States there has been a marked reduction, on the other hand in the number which have adopted higher entrance standards there has been a marked increase. In 1900 there were only two medical schools which required any preliminary training beyond a high-school course, and for the vast majority even the high-school requirement was merely nominal. As the chart shows, by 1910 the colleges requiring one or more years of collegiate work for admission had increased to 40, and to 52 in the year 1913. In 1914, according to statements published in their announcements, 25 other colleges will put into effect the higher entrance standards, making a total of 77; over 75 per cent of all colleges will have adopted the advanced requirements. As may be surmised, the marked reduction in the number of medical colleges has not been to the detriment of medical education, but has been to its advantage; it has not lessened the opportunities for students to study medicine, but has provided them with greater opportunities in better-equipped colleges. Even now many of the better colleges could, with their present teachers and equipment, care for from two to several times the number at present enrolled. The reduction has merely done away with the vast oversupply and has left a more nearly normal number which, in the meantime, has greatly improved in quality. The majority of medical colleges have not only ceased to compete with the high schools for students from the grammar-school grades, but also are directing into our universities and colleges of liberal arts many students who otherwise would never have placed foot on a college campus. The medical school is no longer adding to the confusion of educational standards in this country, but is helping to bring about and uphold system and order.

ADMISSION REQUIREMENTS OF MEDICAL COLLEGES.

As already inferred, entrance requirements to medical schools prior to 1900 were largely nominal and, with the exception of two colleges, consisted at most of a four-year high-school education. In all other leading nations, besides the secondary school training, one or two years of college work, including courses in physics, chemistry, and biology, were required. In 1905, therefore, in its first report to the American Medical Association, the Council on Medical Education presented what was then termed an "ideal standard,"[1] which

[1] The "ideal standard" suggested by the council included:
(*a*) Preliminary qualifications such as would admit a student to a standard university, and in addition
(*b*) The completion of at least one year devoted to college courses in physics, chemistry, biology, and a modern foreign language, preferably German or French.
(*c*) A four-year course in an approved medical college, each session to consist of at least 30 weeks of actual work, exclusive of holidays, and
(*d*) A fifth year spent by the student as an interne in an approved hospital.

included the requirement of a year of work devoted to college courses in the sciences named, in addition to the completion of a standard four-year high-school course. By January 1, 1912, about 50 colleges had voluntarily adopted the higher preliminary requirement and were supported by 10 State licensing boards, which adopted one or two years of collegiate work as their minimum requirement of preliminary education for candidates seeking licenses in those States. In June, 1912, the American Medical Association adopted a resolution directing the council, after January 1, 1914, to include among acceptable medical colleges (in class A) only such colleges as were exacting the higher requirement for admission. In February, 1913, the Association of American Medical Colleges adopted a resolution providing that only colleges rated as acceptable by the council could become or remain in membership. Five other State licensing boards and 27 other medical colleges have since adopted the increased requirement, so that the "ideal" standard of 1905 has, in 1913, become the essential standard.

THE STANDARD OUTLINED.

The following schedule of minimum requirements for admission to medical colleges was adopted at a meeting of a joint committee representing the Council on Medical Education and the Association of American Medical Colleges, held March 22, 1913, with the advice of several experts in preliminary and general education, but especially that of Dr. Kendric C. Babcock, chief of the division of higher education of the United States Bureau of Education:

ADMISSION TO THE PRELIMINARY COLLEGE YEAR.

(*a*) For admission to the preliminary college year, students must have completed a four-year course of at least 14 units in a standard accredited high school, or have its equivalent as demonstrated by an examination, and a transcript of the student's work should be secured direct from the principal of the high school by the college authorities and kept on file.

(*b*) The required and elective subjects for which credits for admission to the preliminary college year may be accepted are shown in Table 3.

TABLE 3.—*Schedule of subjects offered in academic and secondary schools, credits in which are acceptable for entrance to the preliminary college year leading to the medical courses.*

Subjects.	Units.[1]	Required.[2]	Elective.
ENGLISH:			
READING AND PRACTICE	2	2	
Study and Practice	1		1
MATHEMATICS:			
ALGEBRA TO QUADRATICS	1	1	
Algebra (Quadratic Equations, Binomial Theorem, and Progressions)	½		½
PLANE GEOMETRY	1	1	
Solid Geometry	½		½
Trigonometry	½		½
LATIN:			
GRAMMAR AND COMPOSITION	1	([3])	1
CAESAR	1	([3])	1
Cicero	1		1
Virgil	1		1
Cornelius Nepos	1		1
Greek:			
Grammar and Composition	1		1
Xenophon	1		1
Homer	1		1
GERMAN (OR FRENCH):			
ELEMENTARY	2	[3] 2	
Intermediate	1		1
Spanish:			
Elementary	2		2
Scandinavian:			
Elementary	2		2
HISTORY:			
AMERICAN HISTORY AND CIVIL GOVERNMENT	1	1	
Greek and Roman History	1		1
Medieval and Modern History	1		1
English History	1		1
Science:[4]			
Botany and Zoology, each	1		1
or Biology	1		1
Chemistry	1		1
Physics	1		1
Physiography	½		½
Physiology	½		½
Agriculture	1		1
Drawing	1		1
Manual Training	1		1
Domestic Science	1		1
Music:			
Appreciation or Harmony	1		1
Total	38½	7	31½

[1] A *unit* is the credit value of at least 36 weeks' work of four or five recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject can not be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

[2] *Required branches.*—Of the 14 units of high-school work the subjects in capitals, aggregating 7 units, are required. Other work to the amount of at least 7 units may be made up from any of the other subjects of the above schedule.

[3] Two units of Greek or Latin may be substituted for the two required units of French or German.

[4] Credentials of each science course must include evidence of laboratory work.

WORK OF THE PRELIMINARY COLLEGE YEAR.

(*c*) The preliminary college year shall extend through one college session of at least 32 weeks of actual instruction, including final examinations.

(*d*) In excellence of teaching and in content, the work of this preliminary college year shall at least be equal to the work done in the freshman year in standard colleges and universities.

(*e*) This preliminary college year shall include courses in physics, chemistry, biology, and French or German, each course to embrace at least eight semester hours of didactic and laboratory work in each subject, as shown in the following schedule, provided that a student may satisfy the requirement of physics in presenting one unit of high-school physics and completing a half year of college

physics which continues and does not duplicate the work done in the high school:

TABLE 4.—*Schedule of courses in the preliminary college year.*

Subjects.	Lectures or recitations per week.	Laboratory periods per week.[1]	Total hours per semester.	Total semester hours per year.
Physics, 1	2	2	4	8
Chemistry, 1	2	2	4	8
Biology, 1	2 or 3	2 or 1	4	8
German or French, 2	4 or 3		4 or 3	8 or 6
Total	10	6 or 5	16 or 15	32 or 30

The same, expressed in class hours.

Subjects.	Total hours of lectures or recitations.	Total hours laboratory work.	Total minimum hours didactic and laboratory.
Physics, 1	64	128	192
Chemistry, 1	64	128	192
Biology, 1	64 or 96	128 or 64	192 or 160
German or French, 2	128 or 96		128 or 96
Total	320	384 or 320	704 or 640

[1] Each laboratory period must extend over at least 2 hours.

(*f*) If a satisfactory "reading knowledge" of German or French is to be obtained in the one year of college work, it is essential that an advanced course be offered, and that the student have completed as a prerequisite in the high school two units of elementary work in German or French.

(*g*) By requiring two years of collegiate work for admission, medical schools would have a greater latitude in the acceptance of high-school credentials. For example, the language requirement in the high school would not be so essential, since the deficiency could be made up in the two years of collegiate work.

(*h*) It is understood, however, that a requirement of two or more years of collegiate work will not excuse the medical school from requiring the completion of a standard four-year high-school course as a prerequisite to that college work. In other words, "college work" will not be recognized as such by the council unless the specified amount of high-school work has been required as a prerequisite.

(*i*) It is also understood that a requirement of two or more years of collegiate work will not be considered acceptable unless courses in physics, chemistry, biology, and German or French, the minimum amount of which is specified in Table 4, are included.

(*j*) In medical colleges planning to give the work of the preliminary year, provision should be made for full-time expert teachers in the various subjects, and sufficient equipment should be provided to enable the students to do the work intelligently—in amount such as will compare favorably with the equipment for these courses in standard colleges and universities.

(*k*) It should be remembered that the chief object of the work of the preliminary college year is to provide the student with a training that will enable him to enter more readily and intelligently on the study of the fundamental medical sciences in the medical school.

COLLEGES AND STATES HAVING HIGHER ENTRANCE REQUIREMENTS.

The 31 medical schools which are now requiring as a minimum for entrance two or more years of work in a college of liberal arts in addition to a four-year high-school education, and the years when this requirement became effective, are as follows:

	Began.
Johns Hopkins University, medical department	1893
Harvard University medical school	1893
Western Reserve University school of medicine	1901
Rush Medical College (University of Chicago)	1904
University of California, medical department	1905
University of Minnesota medical school	1907
University of North Dakota, college of medicine	1907
University of Wisconsin, college of medicine	1907
Cornell University medical college	1908
Wake Forest College, school of medicine	1908
Leland Stanford Junior University, department of medicine	1909
Yale Medical School	1909
University of Kansas, school of medicine	1909
University of Michigan, college of medicine	1909
University of Nebraska, college of medicine	1909
University of South Dakota, college of medicine	1909
University of Colorado, school of medicine	1910
Indiana University, school of medicine	1910
State University of Iowa, college of medicine	1910
State University of Iowa, college of homeopathic medicine	1910
University of Missouri, department of medicine	1910
Dartmouth Medical School	1910
Columbia University, college of physicians and surgeons	1910
Syracuse University, college of medicine	1910
University of Pennsylvania, medical department	1910
University of Utah, medical department	1910
Northwestern University medical school	1911
Georgetown University, school of medicine	1912
Washington University medical school	1912
University of Cincinnati Ohio-Miami Medical College	1913
University of Pittsburgh, school of medicine	1913

The 7 following medical schools have announced the adoption of the two-year collegiate requirement, to take effect in the year given:

University of Georgia, college of medicine	1914
University of Illinois, college of medicine	1914
University of Louisville, medical department	1914
Fordham University, school of medicine	1914
University of Alabama, school of medicine	1915
College of Medical Evangelists, Lima Linda, Cal	1915
Marquette University, school of medicine	1915

The 21 following colleges require, in addition to a four-year high-school course, one year of college work in physics, chemistry, biology, and a modern language, the requirement beginning in the year given:

	In force.
Howard University, school of medicine	1910
Tulane University, school of medicine	1910
St. Louis University, school of medicine	1910
University of North Carolina, school of medicine	1910
University of Oregon, medical department	1910
University of Texas, medical department	1910
University of Virginia, department of medicine	1910
Fordham University, school of medicine	1911
West Virginia University, school of medicine	1911
Medical School of Maine (Bowdoin College)	1912
University of Michigan, Homeopathic College	1912
University and Bellevue Hospital Medical College	1912
Leonard Medical School (Shaw University)	1912
University of Vermont, college of medicine	1912
University of Illinois, college of medicine	1913
Hahnemann Medical College, Philadelphia	1913
Jefferson Medical College	1913
Medico-Chirurgical College of Philadelphia	1913
Woman's Medical College of Pennsylvania	1913
Baylor University, college of medicine	1913
Marquette University, school of medicine	1913

The 23 following medical colleges have intimated that, beginning in 1914, they will require for admission, in addition to the standard four-year high-school education, the premedical college year devoted to courses in physics, chemistry, biology, and a modern language:

	In force.
University of Alabama, school of medicine	1914
College of Physicians and Surgeons, Los Angeles	1914
George Washington University, medical department	1914
Atlanta Medical College	1914
Bennett Medical College	1914
College of Physicians and Surgeons, Baltimore	1914
University of Maryland, school of medicine	1914
Boston University, school of medicine	1914
Tufts College Medical School	1914
Detroit College of Medicine and Surgery	1914
University of Mississippi, medical department	1914
John A. Creighton Medical College	1914
Albany Medical College	1914
Long Island College Hospital	1914
University of Buffalo, medical department	1914
Starling-Ohio Medical College	1914
State University of Oklahoma, school of medicine	1914
Temple University, department of medicine	1914
Vanderbilt University, medical department	1914
University of Tennessee, department of medicine	1914
Fort Worth School of Medicine	1914
Southern Methodist University, medical department	1914
Medical College of Virginia	1914

By January 1, 1914, therefore, there will be 77, or 72.6 per cent of all medical colleges, which will have put into effect entrance requirements of at least one year of college work, including courses in physics, chemistry, biology, and a modern language.

REQUIREMENTS BY STATE LICENSING BOARDS.

That the higher requirements adopted by the medical colleges named will be permanent is assured by the fact that 15 State medical licensing boards also have adopted preliminary requirements, consisting of one or two years of collegiate work, including the sciences named, in advance of a four-year high-school education. These are as follows:

TABLE 5.—*Higher requirements by State boards.*

State examining board of—	Number of years required.	Affecting students matriculating in—	Affecting all applicants.
Minnesota	2	1908–9	1912
North Dakota	2	1908–9	1912
Colorado	2	1910–11	1914
Connecticut	1	1910–11	1914
Kansas	1	1910–11	1914
Indiana	2	1910–11	1914
Utah	1	1910–11	1914
Iowa	2	1911–12	1915
South Dakota	2	1911–12	1915
Vermont	1	1912–13	1916
Pennsylvania	1	1913–14	1917
Kentucky	2	1914–15	1918
Michigan	1	1914–15	1919
Rhode Island	1	1914–15	1918
California	1	1915–16	1919

The adoption of the advanced standard by State licensing boards is the result, rather than the cause, of the action taken by the medical colleges. As a rule, the adoption of higher requirements by each State board followed the action by the medical colleges of that State, or they were adopted simultaneously by the colleges and the board. It is this action by State licensing boards, however, which will force about 30 colleges, which will not do so voluntarily, to adopt reasonably high requirements for admission.

OTHER IMPROVEMENTS IN MEDICAL COLLEGES.

The merging of two or more medical colleges into one in many cities has not only brought about a reduction of the abnormal oversupply of such institutions, but has also led to a remarkable internal development of those schools. More buildings, and therefore more space, were provided by the merger for the remaining school; the combining of the teaching force opened the way for a subsequent reorganization with the selection of the best teachers; the combined equipment of the two or more schools furnished a better equipment

of the laboratories of the one school than was possessed by any of its predecessors; hospital and dispensary facilities, formerly divided among the two or more colleges, were by the merger brought under a single control, where they could be more systematically and more effectively used in the training of young physicians. Incidentally, this more systematic control of hospital and dispensary patients has resulted in a better care of those patients. Above all, the merger of the two or more medical colleges resulted in a united medical profession and a united citizenship back of the one school, and this in turn enabled the medical school to secure better support through local subscriptions and otherwise, not possible when there were two or more competing colleges.

But the internal improvements have not been limited to the colleges formed by the merging process. The erection of new medical buildings, the readjustment of the curriculum, the establishing of new laboratory courses, the purchasing of more adequate equipment, the securing of teaching hospitals (or of closer relationships with other hospitals), and the employing of a larger number of thoroughly trained, full-time teachers, have been the rule in the majority of medical colleges in all sections of the country.

FULL-TIME EXPERT TEACHERS IN MEDICAL SCHOOLS.

The securing by the medical schools of thoroughly trained, full-time professors and teachers particularly for the laboratory branches, has been a very important development in recent years. Heretofore, in the majority of medical colleges, practically all teaching was done by busy practitioners during such spare hours as their practice would permit. During recent years, however, a decided change for the better has set in. In the second tour of inspection made by the Council on Medical Education (session of 1909–10), data were collected showing that, in the 131 medical colleges then existing, there were 643 full-time salaried instructors, or, on the average, about five for each medical college. Excluding the 47 colleges which did not have any such teachers, there were on the average for the remaining 84 colleges between seven and eight full-time teachers. In 1910, therefore, in an outline of the essentials of an acceptable medical college, the council included a requirement that each institution should have at least six full-time, salaried instructors. During the college session of 1911–12, data collected showed that in the 118 medical colleges then existing there were 876 full-time instructors, and of this number 490 held professorial rank, making on the average for each college between seven and eight full-time instructors, about four of whom held professorial rank. Omitting the 33 medical colleges which still did not have any full-time instructors, there were on the average for each of the remaining 85 colleges between 10 and

11 full-time instructors, of whom about six held professorial rank. Heretofore such full-time teachers have been secured only for the laboratory branches. In recent years, however, there has appeared a tendency to provide full-time, salaried professors in the clinical departments also. In some medical schools the private practice of such teachers has been limited to consultation cases. More recently, at the Johns Hopkins Medical School, they will be permitted to practice as they may choose, but are not to accept fees for such work. During the past two years there has been an unusual demand for full-time teachers, so that the next few years will doubtless show a still greater increase in the number employed.

MEDICAL RESEARCH.

Unquestionably the most important and far-reaching development in the medical schools of this country in recent years is that of medical research. No medical school can keep up-to-date either in medical knowledge or in methods of teaching, unless it is itself seeking to discover new truths in medicine. With the rapid expansion of medical knowledge, no medical teacher can well keep abreast of the knowledge of his particular subject unless he is more or less actively engaged in research work. Medical research is the very soul of medical education; without it the medical school is a mere machine, teaching the discouraging facts regarding morbid processes, sickness, and death, without the inspiration of encouragement and hopefulness which comes from delving after new truths and from the discovery of new methods of alleviating disease and pain. In the medical school without research the highest ideal held by the student may often be the financial returns he may gain from his practice. In the research school, on the contrary, by the time he graduates the student is led to realize how boundless are the possibilities of usefulness of medicine, and that his medical study has just begun. It is doubtless the research school which turns out the best practitioners of medicine, and those who are best able to cope with the modern problems of sanitation and disease prevention.

RESEARCH IN MEDICAL SCHOOLS.

During the college session of 1906–7 the inspection of all medical colleges revealed the fact that of the 131 medical colleges then existing, in only about 30 was any medical research carried on, and in about half of these, such as was done was through the efforts of one or two individual teachers in each college, who were already seriously overburdened with classroom work. By the session of 1911–12, however, the number of medical schools in which any research was done had increased to about 60 colleges. In 20 of these, systematic

and regularly conducted research work was carried on by four or more full-time instructors in each school; in 20 others, two or three individuals in each were engaged in research work; and in each of 20 other schools a little of such work was carried on by a single full-time teacher during such odd times as he could spare from his other duties. While there has been an encouraging increase in the number of medical schools carrying on such work, it is still true that regular, systematic, persistent, and effective research in medical schools is practically at its beginning in this country. The rapid extension of such work among medical colleges can not fail to have great results in a better knowledge of medicine, in better methods of treatment, in better trained teachers, in better qualified physicians, and in a better treatment of the sick.

INCREASED CLINICAL FACILITIES.

Another marked development in medical education is the provision for more adequate clinical facilities by a larger number of medical colleges, either through securing hospitals both owned and controlled by the medical school or through contract relationships with large hospitals whereby the medical college has been given more liberal control of the clinical facilities. This is an exceedingly important matter in medical education. If young physicians are to go forth properly qualified to recognize and treat the various complex disorders that affect mankind, it is necessary that during their medical course they have the opportunity, under proper supervision, to study sick patients at the bedside in the hospital. Therefore the medical school, to be properly equipped, needs the charity hospital.

The belief is growing that among the best-conducted hospitals in the country, those which are most up to date in their methods, and those which are rendering the best service to their patients, are the teaching hospitals of high-grade medical schools. It is believed also that for the attending staff of the modern hospital no better-qualified physicians could be obtained than those who are actively connected with a strong, thoroughly equipped medical school, especially if the latter is one which is fostering medical research. By such a combination the hospital is in position to fulfill its triple function of (*a*) rendering the best possible care to its patients, (*b*) adding to the known facts of medicine through medical research, and (*c*) preparing for the community well-qualified nurses and physicians.

Recognizing this threefold function, during the past few years there has been a tendency on the part of the larger hospitals to seek closer relationship with modern medical schools. As examples may be mentioned the Cincinnati City Hospital with the medical department of the University of Cincinnati; the city hospital of Augusta

with the University of Georgia medical department; the Mercy and St. Frances Hospitals with the medical department of the University of Pittsburgh; and, more recently, the Presbyterian Hospital of New York City with Columbia University College of Physicians and Surgeons; the new Barnes and St. Louis Children's Hospitals with Washington University school of medicine; the new Long Hospital with Indiana University school of medicine; and the new Peter Bent Brigham Hospital and other allied hospitals with Harvard University medical school.

In the investigation made by the Council on Medical Education during the session of 1906–7 it was found that of the 131 medical colleges then existing only 24 (18 per cent) either owned or had very liberal control of hospitals having on the average over 150 patients which could be utilized for clinical teaching, and about 10 others were making careful and systematic use, with more or less limited privileges, of clinical material in one or more near-by hospitals. Another 15 either owned and controlled small hospitals or were apparently making fair use of facilities in distant and scattered hospitals. During the session of 1911–12, by contrast, of the 118 medical colleges then existing, there were 38 (30 per cent) which either owned or had liberal control of the patients in hospitals furnishing adequate clinical material for the classes enrolled; about 15 others were apparently making careful and systematic use, with more or less limited privileges, of clinical material in one or more near-by hospitals, and about 10 others either owned and controlled hospitals having a comparatively inadequate number of clinical patients or were making fair use of facilities in distant and scattered hospitals.

COST OF TEACHING MEDICINE.

One of the reasons for the reduction in the number of medical colleges has doubtless been the heavy expense required to furnish training in accordance with present-day medical knowledge. The better buildings which are needed, the extensive equipment required for the several laboratories, the large sums essential to maintain a modern library and museum (and sometimes also to maintain a dispensary and hospital), as well as the large income needed to employ an ample corps of expert, full-time instructors, have long since caused the expense of maintaining a modern medical school to far exceed the income derived from students' fees. During 1912 reports received from 65 medical colleges, giving for each the total cost of maintenance and the total amount received from students' fees, showed that the average amount paid out for the teaching of each student by these 65 colleges was $410, while the average amount received in fees from each student was $122.[1] The excesses of cost over

[1] Figures quoted show income and expense for each student for a period of one year.

income per student in eight schools were, respectively, $2,744, $1,863, $897, $747, $730, $673, $518, and $500. The excess of expense over income from fees per student was over $200 in 28 of the medical colleges which reported. It is safe to say that with the same equipment and at practically no additional expense these schools could easily accommodate two, three, or in some instances several times the number of students at present enrolled, which would greatly reduce the disproportion of expense over income from fees. A further reduction in the vast oversupply of medical schools in this country, therefore, would be in the interests of economy as well as of marked advantage to medical education.

While the cost of teaching medicine has greatly increased, the cost to the individual student has only moderately increased. The cost to the student in some of the medical schools rated in class C by the Council on Medical Education is much greater than in some of the best university schools. Some of the State university medical schools charge fees as low as $50 to $80 per year, while, on the other hand, some class C colleges require fees as high as $100 to $175 per year. The plea which is sometimes heard for the continued existence of low-grade colleges in the interest of the "poor boy who wants to get a medical education," therefore, is apparently more for the boy who is poor in scholarship rather than for the boy who is poor in purse. A movement has been started meanwhile to provide scholarships for worthy students who are without ample funds. There is no reason, therefore, for a student to spend his time and money in a low-grade college, the diplomas of which are now not recognized in the majority of States, when in the same time and for even less money he can get a thorough medical training in one of the best-equipped colleges in the country.

ENDOWMENTS FOR MEDICAL EDUCATION.

From what has just been said, it is apparent that if the physicians of the future are to be trained in accordance with present-day medical knowledge, the medical college must have a considerable income in addition to that obtained from students' fees. The medical school must have either State aid or private endowment. A splendid beginning toward this end has been made during the past several years. As the colleges have advanced their standards and have made improvements, the more generous have been those who had money to give. What President Eliot said in a medical conference in 1908[1] is true, that "the way to get endowments for medicine is to improve medical education." During the past few years several gifts, each amounting to from one to four millions of dollars, have been

[1]Am. Med. Assoc. Bulletin, May 15, 1908, p. 263.

given for medical education, teaching hospitals, or for medical research in medical colleges; a larger number of donations have been made, of which each amounted to hundreds of thousands, and in a dozen or more medical colleges located in various sections of the country local campaigns for funds have resulted in the collection of sums varying from $5,000 to $100,000. State legislatures also are becoming more liberal in their appropriations for medical education. There are now 27 State universities which have medical departments, and for each of them funds have been supplied by the legislature, either in a special appropriation for the medical school direct or included in the general appropriation for the university as a whole. In several States this year appropriations for medical education were made for the first time, while in others the appropriations were largely increased.

THE HOSPITAL INTERNE YEAR.

A very important part of the young physician's training is that obtained while serving as an interne or resident physician in a hospital. Following the completion of his laboratory and clinical instruction, an interneship in a hospital gives him an opportunity to develop technical skill and to apply the knowledge he has previously obtained. It gives him confidence in his knowledge and ability, and he is better fitted to begin the practice of medicine in his chosen location. From the standpoint of the patients he is to serve, the hospital training is of even more importance, since the first application of the young physician's knowledge is in the hospital under the watchful eyes of the attending physicians, and false steps, sometimes liable to prove disastrous, are thereby prevented.

Recognizing the great importance of this hospital training, in 1905 the Council on Medical Education in its "ideal standard"[1] of medical education, besides the higher entrance standard already referred to, suggested that a fifth year be added to the medical course, this year to be spent by the student as an interne in a hospital. It was seen that most of the graduates of the better medical colleges were voluntarily taking these interneships, recognizing that such experience was an important part of their medical training. Inquiry made regarding the classes graduating in 1911 showed that, for the better colleges, from 30 to 90 per cent of the graduates had obtained interneships. The deans of about 30 of the leading medical colleges stated that the demand from hospitals for internes was greater than they could supply. For the classes graduating in 1912, reports received from 65 medical colleges showed that about 70 per cent of the graduates had obtained interneships. Statements from many of these in-

[1] See footnote on page 36.

dicated that there were more than enough places to have supplied all the graduates with hospital positions had they desired them. In this connection it is interesting to know that in 1910 the University of Minnesota medical school extended its course for the M. D. degree to five years, including the interne year, for students matriculating for the session of 1911–12 and thereafter. This year Rush Medical College, Chicago, which has provided an optional fifth year since 1905, voted to include the hospital year in the required course for the M. D. degree for students matriculating in the summer of 1914 and thereafter. Leland Stanford Junior University department of medicine, San Francisco, this year adopted a similar requirement, likewise to become effective in 1914. By an amendment to the medical practice laws of Pennsylvania, adopted in July, 1913, candidates for the license to practice medicine in that State hereafter, must first have completed at least a year's interneship in an approved hospital.

During the past year a beginning has been made toward the investigation and classification of hospitals, making particular inquiry regarding their patients, equipment, methods, and willingness to furnish a satisfactory training for internes. Incidentally, no hospital could be considered as acceptable if it did not strictly observe sanitary laws, or did not furnish care to its patients in accordance with present-day medical knowledge. In the reports received some interesting information was secured. There are in this country about 2,500 hospitals, having on the average 100 beds each, and 850 of these reported about 3,000 internes in active service. Since the term of interne service is 18 months, these 850 hospitals provide places for 2,000 internes each year. In this proportion the 2,500 hospitals would provide places for about 6,000 internes each year. The total number of graduates from the medical schools of the United States has been 4,338 each year on the average for the past five years. It is safe to say, therefore, that the campaign just begun among hospitals by the Council on Medical Education should result within the next few years in providing ample opportunities for every medical graduate to secure experience in a good hospital before entering on his private practice. It is evident also that in a considerable number of States the hospital interneship will be required as a prerequisite for the license within the next few years.

POSTGRADUATE MEDICAL INSTRUCTION.

The marked development in recent years of undergraduate education in this country and the numerous mergers of medical colleges should and doubtless will be followed by a campaign for the development of postgraduate medical instruction. The improved medical schools will hereafter turn out physicians who are more thoroughly

trained and in every way better equipped to practice medicine. There needs to be something done, however, for physicians who have long been in practice and who graduated when medical knowledge had not reached its present bounds and when medical schools were not so well equipped to give medical instruction as at present. Again, the knowledge regarding medicine is constantly changing, new methods of diagnosis and treatment are continually being discovered, and there is greater need for specialization. There should, therefore, be established, particularly in our larger cities, courses which all practicing physicians, whether recent graduates or not, could occasionally attend in order to keep in touch with these more recent developments.

Such courses for physicians should differ essentially from those given to undergraduate students and should be given separately. Whereas the courses for the student must necessarily touch upon all the known facts of medicine, the courses provided for the graduate physician should be such as to permit him to concentrate his research along certain narrow lines; in these courses, as in so many of the post-graduate courses abroad, the student-physician should perform the operations, under the careful guidance of the teacher, and these courses should be of sufficient number to enable the physician to make good use of the few weeks or months which he can occasionally spare from his practice. The physician depends on his practice for a living, and that practice requires the physician's personal attention. Nevertheless, he could and doubtless would avail himself occasionally of any opportunity to perfect himself along modern medical lines if in a few weeks or months he could secure, in a city near by, courses which were of actual value to him.

In the majority of American cities at the present time no post-graduate courses are available, and in the few cities where such work is given, as compared with some foreign cities, the courses are not of such quantity as to permit a very satisfactory selection. To take such few courses as are offered along any desired specialty would still leave much time which the physician would have to spend in less essential work or which would be entirely lost. Worse still, it is only too frequently the case that after a physician has spent much time in finding out what courses are offered in a city and has spent still more time in locating the courses deemed desirable he learns, perhaps, that the courses selected conflict and that only one or two can be taken.

How much better if all the hospitals and dispensaries in each city were affiliated under a centralized control, at least so far as their post-graduate material was concerned, so that the largest number of good courses could be organized, good teachers found, the patients properly classified, and all conflicts avoided. The centralized administration could then publish schedules of the various courses and circulate them widely among the physicians of the surrounding community, thereby

taking the initiative in urging physicians to avail themselves of these opportunities for keeping abreast of modern changes in medicine. The centralized control would help to develop the various postgraduate courses, which would soon become recognized, so that a physician of the community on finding a particularly interesting patient could refer it to the special course dealing with that disorder.

It is undoubtedly the centralized control of postgraduate clinical material in each of the several continental cities of Europe which has made those cities famous from the standpoint of postgraduate medical instruction. Meanwhile, it is worthy of note that in each of those famous centers—e. g., Vienna, Berlin, and Paris—there is only one strong university medical school. In London, on the contrary, there are 12 medical colleges, each controlling its own hospital or group of hospitals and, although that city has a much larger population and possesses a greater abundance of clinical patients, it has never held so great a reputation for postgraduate medical teaching as the cities on the Continent. The reason is clearly the lack of a centralized control, which has prevented the most effective use of the material at hand. This, at least, is the view expressed in a recent article by an English authority on that subject.[1]

There is in each of many large American cities an abundance of hospital and dispensary material which could be used for postgraduate instruction, to the great advantage not only of the hospitals and dispensaries and of their patients, but also to the advantage of the physicians taking the courses, and of the entire community. It would be of an advantage to the hospital because of the atmosphere of medical investigation and research which would be engendered; the hospital could better fulfill its obligation to the community which supports it; by such teaching the hospital would be the center of a distinct organization, making it more widely known among physicians, and physicians would doubtless cooperate more with the hospital by referring patients to it, including many, perhaps, which would be of particular interest and of service in the teaching courses offered by that hospital. Such an arrangement would be of advantage to the patients in the various institutions, because the physicians conducting the classes and on the attending staffs would be kept more alert and up to date in their various specialties; it would be of great advantage to the practicing physicians attending the courses, since they would be kept in touch with modern medical knowledge; and it would be of advantage to the community through the development of modern research hospitals and of a more thoroughly trained and up-to-date medical profession, who could not only give

[1] Present Position of Post-Graduate Medical Education in the United Kingdom, by Dr. C. O. Hawthorne, chairman of council, Medical Graduates' College and Polyclinic, London. The Lancet, Sept. 6, 1913, p. 707.

their patients better care through the use of more modern and improved methods, but would also be kept in touch with the best methods for the preservation of public health.

Recognizing the need along the line of postgraduate medical instruction, the Council on Medical Education has already begun an investigation of the postgraduate medical schools now existing. This, in all probability, will be followed by a campaign for a more extensive development of this kind of instruction. The past year has witnessed the strengthening of some of the postgraduate schools already existing and also the beginning of a few additional postgraduate schools, notably that of Harvard University at Boston. The last-named institution has taken the right attitude by bringing into affiliation as many of the hospitals of the city of Boston as possible. In order to bring about a still more centralized control of clinical facilities in the various cities of this country a further merger of medical colleges in those cities would be an important step.

GRADUATE COURSES IN PUBLIC HEALTH.

The abundance of information brought to light in the past 30 years regarding the microbic origin of many diseases has revolutionized the methods used in public-health work. Where formerly the etiology of most diseases was theoretical and more or less uncertain, now the causes of many of the more prevalent diseases are clearly understood, the microbic cause of each having been determined with scientific accuracy. This knowledge has also indicated how great the possibilities are of preventing disease through the use of intelligent methods. In recent years there has been a marked extension of work along this line, and an increasing number of public-health officers are employed. It is coming to be recognized, however, that those who are to become health officers should secure a special training, in addition to the medical course. The medical training is essential, since the health officer has to deal with diseases that afflict mankind; in dealing with the problems of water supply and sewage disposal he needs some knowledge of engineering and architecture; for the preparation and enforcement of proper sanitary measures he needs some knowledge of law; to prevent diseases due to long hours, to occupations, to improper housing, and to man's relationship with man, he needs a knowledge of sociology and economics; to ward off diseases brought to a community from other climes he should be widely acquainted with political, physical, and medical geography. The fact that lines regarding which he needs to have a knowledge are so numerous has led to the creation of special graduate courses for public-health officers. Some medical schools have attempted to lay special emphasis on public-health work in the already over-

crowded undergraduate curriculum, but this of necessity requires that time be taken from other topics of perhaps greater importance. More logical, therefore, is the reasoning that specialization is fully as important in public-health matters as it is in other lines of medical work, and that special graduate courses should be provided. For a number of years such courses have been offered by several English universities, leading to the Diploma in Public Health (D. P. H.), and in the past few years graduate courses have been established by four universities in this country. In 1909 the University of Pennsylvania established a course covering one year leading to the degree of Doctor of Public Health (Dr. P. H.) for graduates in medicine, and the certificate of Certified Sanitarian (C. S.) for those not holding the M. D. degree. In 1910 Harvard University likewise established a course of one year for graduates in medicine leading to the degree of Doctor of Public Health. In 1911 the University of Michigan established a one-year course for graduates holding the A. B. or B. S. and M. D. degrees, leading to the degree of Master of Science in Public Health, and a two-year course leading to the degree of Doctor of Public Health. Also, in 1911, the University of Wisconsin established a one-year course for graduates in medicine or in medical or sanitary science, leading to a Diploma of Public Health. Courses of a similar nature are contemplated at other universities.

TROPICAL MEDICINE.

The activity of the United States Public Health Service in recent years in Cuba, Porto Rico, Panama, and the Philippine Islands has called attention to certain disorders originating chiefly in tropical climates and due to special forms of bacteria or to protozoa. This has led to the establishment of special courses in tropical diseases in several of the leading medical schools. The study of these disorders has been deemed important enough by Tulane University of Louisiana and by Harvard University to warrant the creation by each of a special school of tropical medicine, provided with a full corps of expert investigators. Researches by such schools in the next few years are bound to result in a better knowledge of many disorders regarding which hitherto very little was known.

HINDRANCES TO PROGRESS.

The chief hindrance to progress in all lines of medical education in the United States is the lack of a single national legal control of all educational matters, including medical colleges. In fact, most of the evils which have arisen in general and medical education in this country are the direct result of the confusion and conflict of standards held by the multiplicity of independent boards having these matters in charge.

In every other country having a standing comparable with that of the United States the control of education is a function of the National Government. Medical education in those countries has never been separated from the universities, and low-standard, commercial, and sectarian institutions calling themselves medical colleges, or colleges of this or that system of treatment, never gained a foothold. The same or higher standards were enforced for the medical school as for the other departments of the university; medical education has always held a dignified place; and uneducated or improperly trained doctors are rare exceptions, if found at all.

In the United States, on the contrary, the National Constitution throws the responsibility for educational standards on the individual States—a responsibility (regarding medical education, at least) which even now has not been fully appreciated or fully assumed by many of the States. In most States to-day, any group of men could secure the legal right to open a medical college, and no questions would be asked regarding their resources or ability to furnish a medical education. From the standpoint of legal control, medical education has been largely divorced from other kinds of education and separate boards have been provided to administer it. There is, therefore, a great multiplicity of boards having in charge the various departments of education. For medical education alone, in the 49 States,[1] instead of a single law providing a single standard, there are 49 different medical-practice acts providing 49 different and often conflicting standards. Yet these are the only barriers which have been placed between the public and the thousands who seek the right to treat human ailments, including the incompetent or imperfectly trained product of low-grade medical colleges. Worse still, the enforcement of these laws is placed in the hands of 62 different and independent boards, in several instances there being two or three boards to a State. Even then, other laws have been adopted in 20 or more States providing special boards and easy educational standards for licensing the graduates of a legion of institutions teaching under various names only portions of the medical course, but which grant degrees of "Doctor" of this, that, or the other—the public do not know the difference, since they naturally expect that only properly educated "doctors" will be licensed. Meanwhile, sectarian medicine is not so much a problem of medicine as it is a problem of education—of educational standards. That every "system" or method of treatment has some value may be taken for granted. The main question to be considered is: Has this "practitioner" had sufficient education and training to enable him to recognize the disease he is attempting to treat, and to know whether his particular "specialty" is the one

[1] Including the District of Columbia.

to be used or whether it is the very one most dangerous to the patient? One standard—an educational standard—therefore, should be upheld in the licensing of all who practice the healing art. And unless the colleges training such "doctors" are adhering to reasonable educational standards, and unless they possess the adequate teachers, laboratories, and clinical facilities, they should not be considered worthy of recognition.

It is not surprising that, with all this confusion and conflict of authority, low-grade medical colleges and schools for every medical fad in the category have grown up like toadstools. Even though one State may be blessed with excellent control, there remain the other 48 in some of which the "graduates" of these heterodox institutions may obtain licenses. If an ignorant or conscienceless practitioner has his license revoked in one State, he merely moves across the State line, when he seldom has difficulty in securing another license. Often, however, the powers of the local board are so limited or so hedged in that even though his license may be revoked, the low-grade "doctor" can defiantly continue in practice. Instances could be given where State licensing boards have withdrawn recognition from medical colleges, but which continue to exist by having their graduates go to other States in which the boards are willing to examine them. The great need in this country is a single or unified control of these matters, which can not be hampered by local or petty influences. Surely, the dignity of this great Nation should no longer permit the continuance of this dire confusion in educational standards.

During the past several years there has been considerable improvement of standards and of methods in many individual States (see Table 6), and within the last two years there has been formed

TABLE 6.—*Advances in State license requirements in nine years.*

Requirement or provision.	States having such provision.			States still having no such provision.
	1904	1913	Increase.	
Any requirement of preliminary education	20	41	21	8
A standard four-year high-school education or higher	10	37	27	12
One or two years of college work as a minimum	0	13	13	36
That all applicants be graduates of a medical college	36	45	9	4
That all applicants undergo an examination for license	45	48	3	1
Requirement of practical tests in the license examinations	1	6	5	43
Full authority by board to refuse recognition to low-grade colleges	14	30	16	19
Boards refusing to recognize low-grade colleges	5	27	22	22
Reciprocal relations with other States	27	38	11	11
Single boards of medical examiners	36	41	5	8

a Federation of State Medical Boards which has a great opportunity for good. The chief function of this federation should be to secure the closest possible cooperation between all the various boards; to secure the adoption of reasonably high standards of education; to

develop the most satisfactory methods of examination; and to bring out an equally effective and efficient administration of the State medical license laws in all States. The enforcement of educational standards in medicine and the fixing of barriers against incompetent practitioners are educational problems of the utmost importance—they are matters of life and death to that portion of the public who are unfortunate enough to need the care of a physician. There should be established, at least in each State, a single minimum educational standard governing institutions teaching medicine and governing those who are to practice the healing art.

IN CONCLUSION.

The past several years have witnessed great strides in the improvement of medical education and educational standards, and this progress has been continued during the past year. But there still remains much to be done. The campaign is one in which the public should be chiefly interested, and it should be kept up with the consciousness that the improvement in medical colleges, the extension of medical research, the better hospital relations, the stronger postgraduate courses, and a unified and more effective control of medical education will produce for this country better trained physicians. This, in turn, means better care of the sick and suffering, a better knowledge of public health problems, and a greater preservation of health and happiness.

CHAPTER IV.

DENTAL EDUCATION.

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Contents.—Beginnings of dental education—The original curriculum—Later development of dental schools—Two lines of development—Relations with medical schools and universities—The standard curriculum—Admission requirements—Influence of mouth disorders upon general health—Post-graduate study and research—The Forsyth Dental Infirmary—School dental clinics—Dental nurses—The Evans Museum and Institute—Conclusion.

BEGINNINGS OF DENTAL EDUCATION.

Dental education as an organized system had its inception in the founding of the Baltimore College of Dental Surgery in Baltimore, Md., in 1840. Previous to that date no means existed for the systematic education of the practitioner of dentistry, and the qualification for dental practice, such as it was before that time, was derived from two distinctly different sources: The first, men educated as physicians who from preference, or more often because they had not attained a satisfying success in medical practice, turned to dentistry in the hope of improving their incomes; and, second, laboratory artisans whose manual skill enabled them to construct prosthetic appliances or perform the simpler restorative operations characteristic of the earlier period of dental practice. The first class lacked the manual constructive ability of the latter, and the latter was without the medical and surgical knowledge, such as it then was, of the former. While the founding of the Baltimore College of Dental Surgery by Horace H. Hayden and Chapin A. Harris inaugurated a movement and established an ideal in dental education which has since been largely attained, the persistence of the original impress made by the two modes of educational approach to dental practice before the establishment of the premier dental college is still manifest in the ideals of dental education advocated and represented in the system in vogue at the present time.

It is of interest to note that, previous to the founding of the first dental college, application was made by the originators of the enterprise to the medical faculty of the University of Maryland, asking that body to add to the course of medical instruction given in that

institution a course of lectures and facilities for training students for dental practice. The proposition was rejected by the medical faculty on the ground that the dental specialty was of no importance, and it was the rejection of this proposition which determined Hayden and Harris to provide means for the systematic education of dentists by founding an independent institution.

It is doubtless a fact that this incident determined the placing of dental education upon a basis separate from medicine as an independent educational enterprise. It is also a fact that the original purpose of the pioneers in dental education to make the training of dentists a recognized part of the medical curriculum suggested a motif in dental education that has never been wholly lost. Indeed, notwithstanding the extraordinary development which has characterized the practical development of dental education upon an independent basis, there has been a continuous effort, to a degree successful, to combine the educational preparation for dental practice with a complete training in medicine marked finally by the medical degree. It is worthy of note that the survival of these two educational motifs in dentistry is represented by two classes of educators. Those who hold that the education of the dentist should be attained through a curriculum specially designed throughout to meet the requirements of a distinct profession; and another class who hold that the dentist should first fulfill the requirements for the medical degree, and should superadd thereto the training necessary to equip him for meeting the special requirements of dental practice. The latter class designate their field of activity as stomatology and themselves as stomatologists, and contend that the terms "dentistry" and "dentist" are too restrictive to designate the full professional activity of the stomatologist. Broadly considered with respect to the scope and utility of their bearing upon the field of activity which constitutes the recognized territory of the dental practitioner, the two ideals are representative of a distinction in point of view rather than of any real difference in educational efficiency.

THE ORIGINAL CURRICULUM.

In the founding of the first dental college the arrangement of the educational curriculum, as well as the mode of teaching, was largely patterned after the methods in vogue in the medical schools of the period. Medical education in the United States in 1840 was in its infancy. There were no legal restrictions upon the practice of medicine in the sense in which we understand such restrictions to-day. The attainment of a medical diploma was considered to be evidence of sufficient training to entitle the holder thereof to practice the profession of medicine without examination and license

from the State. No standard of educational fitness was required of matriculates as a prerequisite for admission to medical classes. The course consisted of two brief annual sessions of four months each, the second course being usually a repetition of the first. The institutions depended for their income upon the revenues received from students, and the faculties participated in the profits of the educational enterprise. All these factors tended to enlarge the size of the classes, to make graduation easy, and to increase the income of the institutions, but correspondingly to lessen the educational equipment of the students. While these conditions may be said to characterize the state of medical education of the period as a whole, it is scarcely necessary to add that, despite the many obstacles with which they were compelled to contend, there were many brilliant examples of high attainment, both as teachers and as students.

LATER DEVELOPMENT OF DENTAL SCHOOLS.

The success attained by the first dental school quickly demonstrated the need for such institutions, and others rapidly followed. The Ohio Dental College, in Cincinnati, was chartered in 1845; the Transylvania School of Dentistry, in Kentucky, and the Philadelphia College of Dental Surgery, in 1850; the New York College of Dental Surgery, in Syracuse, in 1852; the Pennsylvania College of Dental Surgery in 1856; the New Orleans Dental College in 1861; the Philadelphia Dental College in 1863; the New York College of Dentistry in 1865; the Missouri Dental College, in St. Louis, in 1866; and the Dental School of Harvard University in 1867. At present the total number of educational institutions in the United States providing courses of instruction leading to the dental degree is 48. The total number of graduates for 1912 was 1,940, of which number 1,239 passed the various State licensing examinations and 213 failed to pass, leaving 488 graduates who failed to apply for an American State license. Presumably many of them were of foreign origin and returned to practice in their native countries.

The unsatisfactory state of affairs due to lack of admission requirements sufficiently stringent to exclude the educationally unfit, and the necessity for sufficiently large classes to maintain the schools upon a remunerative basis, led to methods of competition for student patronage which became exceedingly objectionable to those who had the higher interests of dental education at heart. An effort was made, therefore, to correct the evils by concerted action, and to that end a meeting of educators was called for the discussion of the general problem of dental education. The movement resulted in the creation in 1884 of the National Association of Dental Faculties. From the activities of this body a fair degree of unification of the

curriculum leading to the dental degree has been achieved, minimum standards of qualifications for admission have been established, and abuses formerly arising from irregular methods of competition for student patronage have been abolished.

Progress in eliminating the defects in the dental educational system has been comparatively slow, and it was necessarily so in the earlier history of the movement, for the reform lacked the stimulus and support of an educated and intelligent professional sentiment in its favor. With the general recognition, both by the public at large and by the dental profession itself of the serious importance of dental practice in its relation to individual and public health, the demand for more efficiently equipped dental practitioners has become continually more insistent. In response to the general demand the standards of dental education are progressively improving and the scope and character of the education of the dental practitioner is constantly enlarging to a degree which is in general accordance with the advance in educational activity in all departments of human interest.

TWO LINES OF DEVELOPMENT.

As previously stated, dental education has developed along two distinct lines, having their origin in two equally different conceptions as to the character of education best adapted to developing efficiency. The first conception is that dentistry is a special department of the science and art of healing, and therefore that the proper curriculum for the education of the dentist should include the medical curriculum leading to the medical degree, and, in addition, the special training necessary to fit the practitioner for the performance of the the operations characteristic of dental practice. And the other, while recognizing that dentistry is a special department of the science and art of healing, would eliminate from the dental curriculum so much of the medical as is not specifically required in dental practice, and would substitute therefor an adequate training in those special departments which are necessary to and characteristic of dental practice.

Practical recognition of the first-described system is exemplified in the statute recently enacted in the State of Virginia, which requires that all practitioners of dentistry in that State shall hereafter be holders of the medical degree. No other State of the United States has yet made the attainment of the medical degree a prerequisite for the practice of dentistry. Reliable statistics are not available for determining the number of dental practitioners in the United States who are holders of the medical degree. Still less is it possible to determine the number who have taken the medical qualification for the definite purpose of improving their efficiency as dental practition-

ers, but their number is quite small in proportion to the large body of dentists whose qualification is represented exclusively by the degree which marks the successful completion of the specialized standard course of dental training.

RELATIONS WITH MEDICAL SCHOOLS AND UNIVERSITIES.

Classified with respect to medical affiliations, seven dental schools are departments of medical schools, and the other dental colleges are conducting their educational work upon the ideal that efficiency in the dental practitioner is best obtained through a specialized curriculum, as set forth in the foregoing second classification.

In the analysis of this second and major group of 46 American dental schools it is interesting to note that 27, or more than one-half of the total number, are allied with universities, either as an integral part of the university system or having at least a quasi university relationship, leaving 19 other schools which are avowedly private and independent corporations.

In 1867 recognition was given to the specialized educational curriculum by the founding of the Harvard Dental School as a recognized department of Harvard University. As evidence of its recognition of that principle, Harvard University created a distinctive degree of Dentariæ Medicinæ Doctor. The educational ideal involved in the creation of its special degree is clearly set forth in the words of Dr. Charles W. Eliot, then president of Harvard University, in an address delivered before the American Academy of Dental Science held in Boston, October 30, 1878:

> Unlike degrees in arts, which merely indicate a certain amount of liberal study, no matter in what subjects, professional degrees should plainly declare the precise sort of training for which they stand. Since the training of a dentist upon a three years' course of study is in good measure different from that of the physician or surgeon, it may well culminate in a special dental degree easily distinguished from the degree in medicine; just as the difference between the training of the civil engineer and the mining engineer is wisely marked by the use of two degrees which indicate that the trainings for these scientific professions are in good part diverse, though also in good part common.

He says further, in reference to the unfitness of the medical degree as a mark of dental qualification:

> Moreover, the community will have no certain evidence that the dentist who holds the diploma of doctor of medicine and not that of doctor of dental surgery or medicine has ever pursued any dental subjects at all.

The precedent thus established by Harvard University was followed by the University of Michigan in 1875, the University of Pennsylvania in 1878, and by other universities from time to time.

Two important results have been the outcome of the placing of dental education under the fostering care of seats of higher learning—

the first being the practical recognition by the educational authorities of America of the soundness of the doctrine that the educational training of the dentist should be specialized training; the second, the stimulus which the university relationship has given to the development of dentistry along higher educational lines. This stimulus has tended toward the larger development of dentistry simply as a natural result of contact with the academic atmosphere and the progressive spirit characteristic of a seat of higher learning. An equally potent stimulating influence has been that of the economic factors involved. The centralization of teaching characteristic of the American university plan has made it possible to furnish a professional education under the university system at less cost to the student than education of the same character and grade can be furnished to him in a segregated professional school. Hence the unmistakable trend of all professional education is toward centralization under the university system, and the effect of university relationship upon dental education is quite analogous to that recognized in connection with education in law, medicine, and engineering.

THE STANDARD CURRICULUM.

The standard curriculum in all American dental schools consists of three annual sessions, in separate years, extending from on or about October 1 until the middle of the following June. Embraced in the curriculum is thorough training in practically all of the elementary scientific subjects which are the groundwork of the standard medical curriculum, embracing anatomy and its subdivisions of osteology and histology, chemistry, bacteriology, physiology, and pathology, all with appropriate laboratory instruction. In addition are those subjects which are specially required for the training of the dentist, including operative and prosthetic dentistry and their subdivisions, together with the necessary laboratory training and the clinical practice needed to give the student not only the intellectual comprehension, but the practical manual facility to utilize his knowledge for the needs of efficient practice. Upon the elementary training in anatomy, physiology, and pathology is superimposed a training in the special application of these branches of medical science to the treatment of diseased conditions of the mouth and its organs, and in the structures adjacent thereto.

ADMISSION REQUIREMENTS.

The preliminary educational qualification requisite for admission to the course is satisfactory completion of a standard four years' high-school course, or its equivalent as determined by examination. This standard logically articulates the termination of the public-

school educational system with the beginning of the professional course of instruction in dentistry.

The activities in the direction of higher educational development, notwithstanding the extent to which postgraduate instruction is endeavoring to meet the demand for additional training, are making it more and more evident that the present curriculum of three years is insufficient in point of time for equipping the prospective dental practitioner as thoroughly and as efficiently as he should be equipped in order to meet the demands upon his professional resources. The necessity for lengthening the curriculum of dental study by the addition of one more year is broadly recognized among dental educators, and it can scarcely be doubted that, with the increasing necessity for a larger training resulting on the one hand from the general increase of data constituting the basis of dental knowledge, and on the other the increasing demand for advanced instruction, the standard curriculum in dentistry must in the very near future be increased to four years, so as to equal in duration the present standard medical curriculum.

INFLUENCE OF MOUTH DISORDERS UPON GENERAL HEALTH.

Comparatively recent developments which have been the outgrowth of scientific research in connection with pathological conditions arising within the mouth and the relationships of these disorders to bodily health have served to focus attention, not only of the dental profession, but of the medical profession and of those who are concerned with the problems of sanitation and of public health, upon the importance of the mouth cavity as the source of many conditions which more or less seriously affect the general health of the individual. The enormous importance of mouth diseases in connection with public health has aroused attention in all civilized countries, with the result, among other things, that the demand for expert knowledge wherewith to combat this source of ill health and disease has had a marked effect in enlarging the scope of the curriculum through which the prospective dental practitioner must pass before he can be considered competent to deal with the problems confronting him.

POSTGRADUATE STUDY AND RESEARCH.

The demand for more thorough training of the dentist, both in his relation to private practice and in connection with public-health service, arises not only from sources outside of the dental profession but within the dental profession itself. Among the most evident manifestations of the pronounced interest in higher dental education is the demand for postgraduate study upon the part of members of the dental profession already in practice. In the response to this demand

nearly all the dental colleges are offering graduate courses open to practitioners and are furnishing instruction to special graduate classes in all of the more recent developments of dental art and science.

A further manifestation of the same impulse is the creation of a research commission, under the auspices of the National Dental Association of America, having for its object the promotion of research in matters pertaining to dentistry. The committee on the scientific foundation fund has collected from the dental profession about $25,000, and has instituted active work in several important directions of scientific research which have already produced valuable results. An important and encouraging feature of this movement is the widespread and practical interest which its purposes have aroused throughout the dental profession of America. Not only is the fund itself rapidly increasing in amount, but the movement has aroused such a degree of enthusiasm that there is every reasonable prospect that the work of the commission will be made secure and permanent upon a sound financial basis. The present purpose of the trustees of the fund is to stimulate a general interest in dental scientific research work, and to promote work by dental investigators connected with educational institutions by providing them with the financial support.

THE FORSYTH DENTAL INFIRMARY.

Among other developments which have been the outgrowth of the larger educational training both of the dental profession and the public in connection with mouth hygiene in its relation to bodily health has been the creation of the Forsyth Dental Infirmary in Boston through the liberality and broadmindedness of John Hamilton and Thomas Alexander Forsyth as a memorial to their brothers, James Bennett and George Henry Forsyth. The institution was incorporated in Boston in 1910. The building and the land upon which it stands, together with an endowment of about $1,000,000 to provide for maintenance of the institution, represent a gift of about $2,000,000. The purpose of the Forsyth Dental Infirmary is to furnish free dental service to all of the public-school children of Boston under the age of 16 years, and in addition it is proposed to utilize the institution for practical teaching in oral hygiene and to carry on scientific research, particularly with reference to the relationship which mouth infection, malpositions of the teeth, and deformities of the dental arches bear to general disease causation. The institution, besides its public-service work in oral hygiene, will exert an educational influence through the medium of public lectures on matters relating to the care of the mouth and the relation of oral hygiene to

bodily health. The building is almost completed, and it is expected that it will be ready for dedication early in the present year.

SCHOOL DENTAL CLINICS.

Other notable expressions of the same general impulse are the creation of public school dental clinics in nearly all of the large centers of population and the appointment of dental practitioners to the staffs of various hospitals throughout the country and upon municipal and State health boards. It is evident that both the public and the dental profession are keenly alive to the important causal relation which mouth infection and mouth disorders bear to many phases of bodily ill health.

DENTAL NURSES.

As a logical outgrowth of the general activity with reference to hygienic care of the mouth, a movement has been actively in progress during the past year for the training of capable young women for a professional activity in connection with oral hygiene somewhat analogous to that of the trained medical or surgical nurse. These dental nurses are trained to act as assistants to dental practitioners and in hospital service, and to be capable of giving intelligent cleansing surface treatment to patients having infected accumulations upon the teeth.

In some States, notably Massachusetts, the legislature has had under consideration the passage of an act for legalizing the status of the so-called dental nurse and issuing to her a license, after ascertaining by examination that she is properly qualified for her duties. The legislative aspect of the dental-nurse question is still undetermined, but provision has already been made in Bridgeport, Conn., by a competent faculty under the direction of Dr. Alfred C. Fones, for the systematic and adequate training of professional dental nurses, and the movement seems destined to become an educational fixture.

THE EVANS MUSEUM AND INSTITUTE.

Among the later developments in dental educational activities is the founding of the Thomas W. Evans Museum and Dental Institute in Philadelphia, under the bequest of the late Dr. Thomas W. Evans, of Paris, the residue of whose estate, amounting to upward of $1,500,000 has been devoted to that purpose. By agreement between the trustees of the institute and of the University of Pennsylvania, a cooperative affiliation has been effected by which the dental school of the University of Pennsylvania will occupy the institute building, and its faculty will conduct the educational work of the institute.

In recognition of the three well-marked divisions of activity now recognized as factors in dental education, provision in the educational scheme of the institute is made for undergraduate instruction leading to the dental qualification, for postgraduate instruction, and for original scientific research work in matters pertaining to dentistry. The institute building will be the largest structure in the world exclusively devoted to dental instruction, and it will be ready for occupation during the present year. The educational motif of the institute is thoroughly to equip the student for the efficient practice of dentistry, not only from its local and manipulative standpoint, but from the broader constitutional aspects involved in the close anatomical and physiological relations which the mouth and teeth bear to the whole body.

CONCLUSION.

A survey of the entire field of dental activity and development, especially during the year just past, strongly indicates that dentistry has achieved a position of importance both in the mind of its practitioners and of the public at large which places its educational standards and professional activities quite on a par with those of any other specialty of the general science and art of healing.

CHAPTER V.

THE STATUS OF SECONDARY EDUCATION.

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Contents.—Numerical increase greatest in villages—Relative position of private schools—Growing independence of secondary schools—New agencies for controlling secondary education—The entire curriculum under examination—Junior high schools grow in favor—High schools are assuming college work also—Teacher training in high schools—New types and new methods—Supervised study—Coordination should accompany expansion—Coordination lacking in science and in language—Study of the individual student is essential—Education should be adapted to the vocation—Control of outside activities—Extend the activities of the school—Advantages of a lengthened school day—All-the-year schools are demanded—Night schools offer a field for development—The training of secondary-school teachers—The tenure of teachers is too short—Departments of education in colleges—Normal-school training for secondary teachers—A new era of professional administration.

NUMERICAL INCREASE GREATEST IN VILLAGES.

The rapid numerical growth which has characterized the secondary schools of the United States for the past two decades continues without interruption. The facts which have frequently been summarized in these reports show that during the decade immediately preceding 1900–1901 the number of secondary schools, including both private and public, increased nearly 100 per cent and the number of students increased in a somewhat higher ratio. In the decade from 1900–1901 to 1910–11 the number of schools increased from 8,210 to 12,213 and the number of students increased from 649,951 to 1,115,326. At the end of the year 1911–12 there were 13,268 schools and 1,246,827 students.

In an analysis of the attendance statistics made by W. J. Fisher (Science, N. S. 36: 587–590, Nov. 1, 1912) it is shown that in recent years this growth has been most pronounced in the small country or township high schools. The larger centers of population throughout the country have for some years been supplied with high schools. Changes in the urban schools are going forward in the character of the courses of study and in the general equipment and to some extent in the enrollment, but the changes in urban schools are not so conspicuous numerically as the aggregate changes which are taking place

in rural and village districts. Where communities have hesitated in the past to assume the expense of organizing secondary schools, ways and means are now being found of opening such schools. In some cases, in order to get the funds for a high school, new educational administrative units have been created. These new units can raise more funds because they are larger and because the problem of taxing for high schools can be freed from the problem of raising money for elementary schools. There are certain disadvantages which arise from a separate organization of elementary and secondary education in the same region, but the separation is regarded as on the whole better than the absence of public secondary schools would be. In time the organization will improve and the two schools will doubtless be brought together again. A second method of enlarging the opportunities of secondary education offered to rural or village students is through the payment of tuition of such students in neighboring high schools, either by the central State educational authorities or by the local authorities. In some cases this payment of tuition is supplemented by payment in part or in full of transportation expenses. A third somewhat different form of support for high schools exists in some States where the central State department makes appropriations to support schools, especially those which carry on special courses, such as agriculture. Serious discussion has of late been given to the problem of extending this governmental support to high schools by providing Federal funds for special agricultural and industrial schools. The net result of all of these different provisions is that the opportunity of a free secondary education is now offered to the great majority of the youth of the country.

The internal numerical increase in high schools is no more remarkable than the change in public sentiment which is recorded in this universal public support of secondary education. Two decades ago the question was very commonly raised whether the public purse might properly be charged with the cost of secondary education. To-day there is a public sentiment so strong that free high schools are provided everywhere.

A contributing cause to the growth of secondary schools in rural and village districts is the realization that the course of study may properly include a great variety of subjects. Thus it has been pointed out above that liberal grants are often made from State departments to agricultural education. In Bulletin 1913, No. 6 (Whole Number 513) issued by the Bureau of Education, Messrs. Robison and Jenks have shown the range and importance of agricultural instruction in high schools. Other changes in the course of study, all tending to give the student a broader opportunity to study practical subjects, have fostered the growth of high schools and have encouraged a larger attendance of students.

In this connection it is important that attention be drawn to the conservatism of certain communities, as shown by the analysis made by Mr. Fisher in the paper to which reference is made above.[1] The high schools located in those States which are less advanced educationally are more likely to hold to the traditional subjects of instruction than are the schools in more progressive States. There is evidence in this fact that a community which opens a high school likes to think of the new institution as patterned closely on lines of the traditional high school. There is accordingly a disposition to demand that algebra and Latin be taught and that the approval of some college be sought, whether the organization that results is the most advantageous organization or not. Communities afflicted with this type of conservatism should be encouraged to read the report of a country school which changed its program radically in the effort to adjust itself to local needs (Bulletin 1912, No. 20, Readjustment of a Rural High School to the Needs of the Community, H. A. Brown.)

RELATIVE POSITION OF PRIVATE SCHOOLS.

The growth of public secondary schools led during the past decade to the abandonment of many private and endowed schools which had been centers of secondary education. There is evidence that a new era of private-school development is at hand. A private school is often more at liberty than a public school to make radical experiments and to emphasize certain special forms of training. Thus a military academy, especially if it is a boarding school, takes a responsibility for its students which no public institution could assume. On the other hand, a school which emphasizes relaxation of all formal school regulations and extreme forms of student government, as does the Interlaken School, assumes a responsibility which a public school would be reluctant to assume. For reasons of the type intimated in these examples, private schools are in some cases largely attended. The difficulty of securing accurate information regarding such institutions makes it impossible to assert with assurance how far these schools are flourishing. From the voluminous announcements of such schools which fill the advertising pages of some of the popular magazines and of the newspapers which make a specialty of such announcements, it seems that there is an increase in the number of private schools. Such an increase is also doubtless aided by the growth of wealth among patrons who desire for their children either more exclusive associations or closer personal supervision.

[1] See p. 67.

GROWING INDEPENDENCE OF SECONDARY SCHOOLS.

The numerical growth of the secondary schools has been accompanied by a development of administrative independence which is expressing itself more and more clearly. During the current year the Bureau of Education issued two bulletins (Bulletin, 1913, No. 7, Whole No. 510, College Entrance Requirements, C. D. Kingsley; and Bulletin, 1913, No. 29, Whole No. 539, Accredited Secondary Schools in the United States, K. C. Babcock) which show how far the high schools of the country have gone in freeing themselves from the domination of colleges. The first of the bulletins to which reference has been made shows that the colleges have recognized the independence of the high school to a degree which would have been unthinkable two generations or even one generation ago. There are a great many subjects now accepted by colleges which were not common in high-school programs 10 years ago, such as commercial courses, domestic science, and music; and there is a relaxation of traditional requirements, so that students may now enter many first-class institutions with only one foreign language, and may enter some without any. Indeed, a number of colleges have reached the point where they explicitly leave the problem of organizing the secondary course to the secondary schools.

Nowhere are the evidences of growing independence of the high school more evident than in the changes in entrance requirements reluctantly accepted by the small group of great eastern colleges, which have long admitted by examination only and have further insisted that the student take the strait and narrow gate of their own conservative requirements. Harvard made a change some years ago, because, as President Lowell frankly announced, Harvard found herself getting out of touch with the great western high schools. These western high schools receive from the colleges about them a kind of recognition which eastern high schools have been slow to demand as their right. It is not surprising, therefore, that the western schools should first show the marks of independence in their organization of courses. After Harvard came Yale and Princeton with changes in their plans of admission which recognize somewhat more tardily than Harvard a high degree of autonomy on the part of feeding schools.

In the second of the two bulletins to which reference is made above one finds not only the long list of names of secondary schools approved by State departments and by other accrediting agencies, but also evidences of the development of organizations which are playing a large part in the current development of secondary schools. The colleges served one very salutary purpose in the days when they dominated the preparatory schools—they kept these schools con-

stantly aware of the necessity of organizing the student's course of study toward a definite end. With the appearance in the schools of many students who did not intend to go to college, this method of securing a definition of the student's course became obsolete.

NEW AGENCIES FOR CONTROLLING SECONDARY EDUCATION.

In the past few years, during which the control of the colleges has been breaking down, there has been a good deal of uncertainty as to where the high schools were drifting. There arose thus the need of some definite agency to organize secondary schools along new lines. The units of control must of necessity be larger than the single school. It is too obvious to the observer of schools that the organization of the single school is in great danger of sudden and violent changes. The faculty is transient and the central control is often too weak to organize and carry out far-reaching educational policies. For these reasons it is of the highest importance in the history of secondary education that there is a well-developed tendency for strong agencies to take control of the high schools. These agencies are of two types: First, voluntary associations, which usually include both colleges and secondary schools; and, second, State departments.

The voluntary associations have many elements of weakness. They usually depend on institutions for such inspections as they are able to make, and their authority is limited. Thus Dr. Babcock's list shows that in the territory of the North Central Association of Colleges and Secondary Schools each of the colleges in the association accepts students from a great many schools below the standards of the association. On the other hand, the voluntary association has elements of strength. Since its standards originate from within, the association has great influence in spreading respect for high standards and, since each of these associations covers a number of States, the standards of the association are likely to be higher than those of any single State. In this sense it is well that there should be a broad, general, voluntary association.

The development of State control of secondary education is in most States new and will undoubtedly pass through experimental stages. New York, which has exercised this control through an examination system, does not seem to be generally accepted as a satisfactory example. The States of the North Central section are developing various forms of inspection. Some of these States are experimenting with State prescription of textbooks and State courses of study. Several States are giving influence to their State departments by putting them in charge of State funds to be disbursed to the high schools.

It will be pointed out later, in discussing the supply of secondary teachers, that the State universities are exercising a very large in-

fluence in the organization of secondary schools. In some States there is a lack of complete coordination between the work of the State department and that of the university inspector. This incoordination is a temporary symptom of incomplete development of the system.

THE ENTIRE CURRICULUM UNDER EXAMINATION.

The development of new agencies for the control of secondary education, which agencies are to replace the older college entrance requirements as the dominant influence in the organization of high schools, brings to light a series of problems which were little discussed in the last decade. One hardly ventured 10 years ago to ask why so much algebra should be taught in high school. Of course algebra was to be taught, and its quantity was determined by the college requirements. Now, not only does the question come up, but it confronts a group of high-school officers who are beginning to realize that emancipation from the control of colleges brings to the high school new and grave responsibilities. The high school must now organize itself from within. It must find adequate methods of testing its work. It must relate itself intelligently to the institutions above and below its own sphere of operations, and it must direct its students in accordance with rational and definable principles. The result is that a new series of high-school problems is now recognized by high-school teachers, voluntary associations, and State departments. A brief statement of several of these problems will serve both to define the present work of high schools and to show the direction in which organization within these schools is moving.

The first of these discussions relates to what may be called the range of secondary education. The secondary school can not accept a position between the elementary school and the college without considering seriously the question whether the upper and the lower limits of its domain have been rationally set. There is a growing conviction that neither the lower nor the upper boundary of the secondary school is in accordance with the best interests of students. The last two years of the elementary school are, in point of students' interests, in point of organization of classes and mode of instruction, more like high school than like the other grades of the elementary school. Why not take over the last two years of the elementary school into the high school?

JUNIOR HIGH SCHOOLS GROW IN FAVOR.

In answer to this question a number of school systems have organized junior high schools. Such schools may be defended as satisfying specifically one of three desires. Often it is desired that students who have completed the sixth grade shall have an early opportunity to begin the subjects conventionally taken up in the high school.

Thus, instead of postponing the study of Latin or algebra until the student is 14, he is given the opportunity of taking up one or more of these studies when he is 12. A second reason for organizing a junior high school may be to give the student an opportunity to take advanced subjects, not of the conventional type, but of a type not usually admitted into the curriculum of the elementary school. Thus, if the two-year junior high-school course is offered to students who do not intend to take the full high-school course, it gives them some introduction to civics or to mechanics, subjects which would ordinarily be closed to them until the secondary course. Third, there is the motive of differentiation of the course in order to fit the needs of different students. The student who is going into business should pursue during his thirteenth and fourteenth years subjects other than those which are advantageous to the student who intends to enter a profession. In most cases these three motives are not distinct, but each contributes to a general feeling of dissatisfaction with the present organization and supports the demand for a spread of the junior high-school idea.

The present organization of an eight-year elementary school, followed by a four-year high school, is purely traditional. It can not be justified as adapted to the needs of children if by elementary course is meant a series of years of instruction common to all children in the community. Thus there can be no doubt that in much of the current discussion of vocational and prevocational education there is ambiguity at just this point. Many of those who discuss the problem of a differentiation of the school course state that the problem is one of secondary education. They mean by this that there is a certain general elementary training which is universally required and should precede differentiated, specifically vocational training. When they describe specialized training as secondary in type, they do not mean to use "secondary" as synonymous with the present ordinary high-school course; they mean rather to use the term "secondary" in a broader sense, indeed in a sense very closely related to that in which it is used in those centers which have organized junior high schools. The increase in number of such junior centers is therefore an expression of the conviction that a new definition is required of the lower boundary of secondary schools.

In several centers a movement has begun which undoubtedly will increase in importance. In these centers schools have been opened which are not higher than the elementary school in the ordinary sense; that is, in progression of courses or intellectual difficulty of the courses. Such schools accept students who have become discouraged with elementary work, or show unfitness for ordinary grading with elementary pupils, because of age. These children, who would naturally leave school if no course were open to them except

the usual secondary course, can be further instructed profitably for a period of years. The instruction offered them is usually training in the manual arts, but it may be coupled with a certain amount of review work, or specially prepared reading, science, and number work. Schools of this type have been organized in Scotland under the title Supplementary Classes, and their rise in American cities may serve to simplify greatly the problem of relating secondary and elementary schools by adding to the possibilities offered students an educational opportunity that is neither elementary in the regular sense, nor yet a part of the general progressive plan of education as usually conceived.

HIGH SCHOOLS ARE ASSUMING COLLEGE WORK ALSO.

The enlargements of the secondary school thus far discussed are downward into the domain of the elementary school. No less conspicuous is the tendency of the high school to take on work which has commonly been classified as college work. It has frequently been pointed out that there is much overlapping of courses between the high school and the college. Every college offers elementary courses in modern language, science, history, and in the classics, which overlap the courses offered in high schools. In many parts of the country where secondary schools are not fully developed, rivalry between colleges and these schools becomes so keen that it has been necessary for State inspectors to adopt drastic measures in order to draw attention to the extent to which the colleges are devoting themselves to secondary work. One of the most courageous reports of the year is that of Mr. Hand, of South Carolina, who gives the names of colleges which are competing unfairly with high schools. He gives details in each case, so that the community will be able to judge for itself the extent to which education is impeded by selfish private competition. Furthermore, he points out the mistake which is made by individual citizens in withdrawing their children from the local secondary school and sending them to some so-called college, thereby discouraging and crippling the secondary school and supporting the unworthy college. It is not alone in quarters where competition is keen, however, that the failure of high schools and colleges to define themselves has led to disastrous results. There are very few colleges in which it is not true that the effort to carry an enormous burden of elementary work is curtailing the institution's ability to support adequately more advanced courses. One of the gravest problems confronting the great State universities to-day is the problem of taking care of this condition. It was recently reported that the records of a number of graduates of a great college showed that half the courses taken by most of the students were ele-

mentary courses. These facts show how urgent is the need for a better definition of the upper limits of secondary education.

Finally, a new fact presents itself in the large and ever-increasing equipment of the modern high school. In many urban centers the high school has more material resources than the neighboring small college. The result is that there is a natural tendency for the high school to push its work, through elective courses and through post-graduate work, into the sphere formerly occupied by the colleges.

The organization of freshmen and sophomore college courses in many centers seems a logical development of the public educational system in the United States. The experiment in Wisconsin to satisfy the public demand for more centers for the early years of college training through the organization of freshmen and sophomore college work in each of the State normal schools seems of doubtful wisdom, since it will tend to subdivide the already inadequate facilities for the training of teachers. The State of California has sanctioned by statute the organization of junior college work in high schools. High schools in other parts of the country have also taken steps in the same direction for one reason or another. The movement toward such advanced work is legitimate from every theoretical point of view and will undoubtedly go on until a better definition is reached of the line of division between what is essentially secondary in college education and what is sequent upon secondary training.

TEACHER TRAINING IN HIGH SCHOOLS.

Reference may properly be made in this connection to a tendency which has shown itself in several States to draft the high schools into the public service of supplying teachers for the lower schools. There is no State in the Union which has normal schools enough to meet the annual demand for new teachers. It is natural, therefore, that State departments of education should look to the high schools for co-operation in the training of teachers. In some quarters the high school meets this demand by organizing special courses in methods and history of education and school law. These special courses either are made elective to senior students or are less commonly given as graduate courses. There can be no doubt that this effort to supply more trained teachers for the lower schools is a legitimate and useful movement. How far it should go will depend upon the development of that altogether undefined institution, the normal school. It may safely be asserted that a one year's course given as part of a high-school training or even a one year's course added to the ordinary high-school course is inadequate for the training of teachers. The present use of the high school to satisfy this urgent need may therefore be regarded as temporary. Some larger policy, which it is not primarily the business of the high school to work out, will have to be

adopted by the State in order to supply the requisite number of teachers.

NEW TYPES AND NEW METHODS.

The high school of the future, it would appear from these considerations, is likely to include more than four years. It is likely to reach downward and take in the last years of the elementary school. It is likely to reach upward and take in the early years of the college and possibly of the normal school. Already the term "six-year high school" is familiar through discussions and experiments, and extension in both directions is being tried. When the new type of organization becomes more common, problems of greater economy of time will arise, and questions of the readjustment of courses, such as the earlier beginning of modern languages. In short, the high school as a center of educational reorganization will more and more take up educational problems in terms of its own judgments rather than as a subordinate of the colleges or a mere inessential addition to the elementary school.

Growing directly out of these considerations relating to the range of secondary education, there are, in the second place, a series of current discussions relating to the courses of instruction. Secondary teachers have until recently given little attention to the problems of method and organization of courses. But a number of new publications dealing with methods, addressed to high-school teachers and seriously considered by them, bear testimony to an awakening to pedagogical problems. A few typical examples of such discussions must suffice for this general review.

SUPERVISED STUDY.

There is much current discussion of the problem of class-room study as distinguished from home study on the one hand and from the examination type of recitation on the other. The conventional method of assigning lessons is to designate certain problems to be solved or to indicate a certain number of pages to be read and absorbed. With this assignment the student is dismissed to do his studying by himself. At most a few comments on how the work should be done have sometimes been added to this assignment. The result is that the student in his efforts to prepare his lesson stumbles on a method of study which often is very clumsy. For example, if his problem is to look up the meaning of a foreign word, he very often adopts the most direct method, which is to find in a vocabulary the one particular meaning which fits the passage on which he is at work. It would be looking for more than is reasonable from an immature student to expect him to understand the economy of analyzing the foreign word so that he will see its derivation or to understand

the economy of meanings, fundamental and derived, of the root with which he has to deal. If the student took a broad view of his task and spent the time necessary to prepare fully for future contact with the word, he would have to invest much time and energy which bring no immediate and obvious return. If the student is to adopt this longer and more laborious method of work, he must be supervised. Some one who can see beyond immediate demands must lead him. Like arguments for supervised study can be found in every sphere of school work. It is, of course, not denied by enthusiastic advocates of supervised study that many teachers have in times past used the recitation period as an opportunity for giving suggestions of the type described in the above example. But suggestions are not enough. The student must be watched, especially in the early stages of contact with a new subject, and habits of economical study must be thoroughly cultivated.

In order that this more complete attention to supervised study may be possible, various modifications of the high-school program are being tried. Thus lengthened recitation periods are assigned to one or more subjects with the understanding that the mode of procedure will be radically changed and much class study will be carried on. For example, the experiment is made of double periods in the algebra classes of at least one high school. Algebra has long been recognized as a source of very heavy failure on the part of high-school students. These failures have been referred in some cases to a supposed natural incapacity of certain students for mathematical types of thought. When a failing student is carefully studied, however, it is found that his difficulty arises out of his inability to attack the problem. He does not know the terms in which the problem is stated; he does not know the elementary methods of algebraical manipulation. The class in the meantime is "going through" the book, and the student gets hopelessly behind. The experiment in supervised study is an effort to correct the difficulties which have thus arisen in the past. The instructor is with the student when he attacks the problem. Difficulties are taken up together. There is no formal getting of answers, but there is a genuine attack on problems.

Another device adopted in one high school is to set aside one period each day as a period of study under supervision as distinguished from recitation work. In order that each subject taught in the school may profit by this study period a weekly rotation is established, so that the classes which recite the first period in the morning have the exclusive right to the study period on Mondays, the classes which recite the second period in the morning have the study period on Tuesdays, and so on. In still other cases teachers are directed to use the regular recitation periods for study, as distinguished from recitation, as often as they see fit. It has sometimes appeared under

this plan that the early part of a course should be differently organized from the later part. Thus in the study of a foreign language it has been found by some instructors advantageous to do all the early work in the form of supervised study, making no assignments for private study. In other cases, as in science courses, there are exercises distributed throughout the course which, because of the novelty of their methods, call for intimate supervision.

The effect of all these experiments on home work has been various in different schools. In some cases home assignments have been reduced; in a few cases they have been abandoned altogether. A general report of this kind is hardly the appropriate place for a full discussion of the problem of home study. It may be recorded, however, as the experience of some who have dealt with this problem, that unless students are given some definite tasks which they must work out by themselves they fail to develop independence in attention and in attack upon intellectual problems.

The importance of this movement toward the cultivation of supervised study can hardly be exaggerated in summarizing current discussions of secondary education. The reports of those who have made the experiments are, of course, colored by the fact that the experimenters are in most cases enthusiasts; but if the effects of supervised study continue to show the favorable results which up to this time have been universal, there can be no doubt that a great change will be wrought in the methods of secondary teaching. At the present time there is no large body of information to which the teacher may turn. How one should learn his mathematics or his Latin or his science is a relatively unsolved psychological and practical problem. The movement of supervising study will depend for its success, therefore, upon the cultivation and distribution of a relatively new type of knowledge. The science teacher will have to learn how to help the student to learn to draw and how to help the student to use a laboratory exercise for purposes other than the training of memory. High-school teachers will have to learn how to help students to select the items of knowledge which need to be memorized and how to help students to memorize these items economically and thoroughly. All this involves a broad pedagogical view which has for the most part been absent in high schools.

Before leaving the problem of supervised study, one other phase of the matter which has been much emphasized in recent popular discussions may be mentioned. The difficulty of home study is increased from the student's point of view by the fact that there is usually very little team play in the faculty in assigning home lessons. By a coincidence that seems to recur with fatal regularity, several members of the faculty choose the same night for an extra assignment. The conflicting motives which guide a student's choice of the lesson which

he will first attack under these circumstances would constitute a fruitful subject for psychological study. The only remedy for this difficulty is for the instructors to arrange in faculty conferences the whole outside program of requirements. Indeed, devices are needed for measuring in some more adequate way even the ordinary assignments. Certainly, if extra assignments are to be made, they should be arranged and sanctioned by the faculty as a whole.

COORDINATION SHOULD ACCOMPANY EXPANSION.

A third general topic of interest is one that has been forced upon the attention of both teachers and students because of the complexity of the curriculum offered in high schools. The problem may be stated as the problem of coordinating and at the same time differentiating high-school courses. There are to-day small high schools with two or three teachers which can offer only a limited number of courses of instruction. When one visits such a small school he is, however, more likely to be astonished at the ambitious variety of courses offered than at the meagerness of the program. The small teaching staff, wishing to have a high school of the most modern type, offers a long series of courses in languages, mathematics, history, and science. Whatever limitations there are in the variety of subjects offered in a small high school, limits are removed in the larger institutions. Elective possibilities are here so wide in range that the student is confused and is always in need of guidance. The plea which was justly made a generation ago that the high-school course needed broadening has been met by an enormous development of the secondary curriculum. Indeed, there are those who would advocate a return to the old restricted and fully prescribed course as a remedy for the evils which an elaborate elective curriculum has engendered. Here and there in the country one can find a conscientious school board and a zealous principal operating on the belief that the virtues of the last generation arose out of the limitations set upon their course. It is safe to prophesy that these reactionists will never attract very much of a following. Yet the problem which their protest points out is a real one, and some bounds must be set upon the freedom with which the high-school student may ramble among elective courses.

The direction in which true relief from the difficulties of the situation is to be sought is indicated by the effort of various high-school faculties to outline coherent groups of courses. The student who is to take physics certainly ought to take geometry and algebra and ought to take some other science courses. The student who studies Latin certainly ought to take cognate courses in history and other literatures. While these two examples of sequences might be

accepted by most teachers as rational, we are plunged at once by such concrete efforts to make sequences into the midst of discussions which are carried on in every association of high-school teachers, and, often without generally accepted conclusions, in many faculties.

COORDINATION LACKING IN SCIENCE AND IN LANGUAGE.

Possibly a detailed statement of our case may serve to emphasize the difficulties which beset all departments when they begin to organize themselves. The sciences are, more than other subjects in the high-school course, scattered and dissociated. The student takes a short course in botany or in physiography and then seeks to go on with science. He finds that the elective offered next year is physics. He is told by students who have taken physics that it is not at all related to the first science course which he has completed. He is at a loss to know what he should do. Hardly less is the teacher at a loss. Should physical sciences precede biological or follow? Should chemistry be given, or should it be left for college? Foreign educators who visit our schools are astonished to find that we have no well-organized chemistry courses open to secondary students. All over Europe chemistry is recognized as of such great importance to industry that long series of systematic courses in chemistry and the practical arts dependent on chemistry are organized for relatively young students. High schools in the United States seem to proceed on the psychological ground that the observation of a chemical reaction is difficult because it is usually indirect, and as a result there is little chemistry given. All these cases show how fragmentary is the science instruction in high schools. Contrasted with Latin or German or with mathematics, in each of which fields of instruction the sequence is obvious, science struggles on, comparatively unable to take its place in the high-school curriculum. We note, therefore, the phenomenon of a decline in the ratio of students who elect science. This decline is doubtless due in part to methods of administering the individual sciences, but beyond these particular difficulties unquestionably looms large the lack of coherent organization of the high-school science curriculum.

The difficulties which exist in the science departments are paralleled in the department of English. There is no established practice with regard to the relative emphasis on composition and the study of literature. Within a given department there is great disparity of practice in teaching two divisions of the same class. One of the most hopeful indications that the high-school course in English is to be better organized appears in the rise of a strong organization of English teachers. The National Council of English Teachers has at least recognized its problem and has set about trying to solve it.

The papers presented at the meetings of this organization illustrate the general movement toward better organization of the curriculum in high schools.

Out of the efforts to develop coherent groups of courses there have arisen a number of minor problems which should be mentioned. Thus it has been asked whether there can not be some more fundamental interrelating of subjects. Language teachers are discovering that students have wasted an enormous amount of time because the grammatical terms employed in different language classes have been discordant. There are, these language teachers now tell us, a common grammatical structure in all the languages, and a possibility of referring to the grammatical characteristics of each language in a single common terminology. Great economy in education will result from this alliance of language teachers. The mathematicians have for some time known why algebra and geometry are both announced in the same department, but until recently they have kept their secret from the high-school student. Now, thanks to the work of the International Commission and its committees, American teachers have been made aware of the discussions of methods of teaching their subjects which have been going on for years in France, Germany, and England, and there is a most vigorous interest manifested in the problem of working the mathematical course over so that first-year algebra shall not be the stumbling-block of the high-school curriculum and shall issue into geometry in a natural and truly mathematical way. The problem of organizing science has been referred to above. In this connection note may be made of the first-year general-science courses which are proposed and are being tried in several high schools as introductory courses, covering a wide range and variety of physical and biological problems.

STUDY OF THE INDIVIDUAL STUDENT IS ESSENTIAL.

Administrative devices for securing coherency in the student's curriculum are also becoming common. The school sets up certain groups of electives and insists more or less strenuously that the student shall follow the lines laid down in these groups. In other schools the students are advised, not by the printed sequences, but by the principal or some consulting teacher. In the larger schools the advisor system has come to be very common. Finally, a few schools have carried the organization of the student's work far enough to raise the whole question of the student's probable later vocation, and in the light of this information and a study of his present interests and attainments to build up a curriculum and also in the same spirit to organize all his outside activities.

This most comprehensive interest in the student is undoubtedly the ideal toward which schools should aim. The organized course of study may mean, and undoubtedly does mean, some modification of the classroom instruction, but the course of study for any given student can never be fully and satisfactorily organized without a minute study of the student himself.

The recognition of the student's needs as the central problem of school organization has come to be such a common theme in current educational discussions that there is no need in such a report as this of discussing the theoretical aspects of the matter. It is appropriate, however, to point out briefly that each year sees certain concrete changes in secondary education which arise in the effort to emphasize the student's needs. Take, for example, the differentiation of the curricula pursued by girls and boys. This may be illustrated first by a negative example. In a number of secondary schools, girls are excused from the mathematics courses. Gradually the colleges have receded in the matter of entrance requirements until the higher algebra which used to be common has very largely disappeared. Now the pressure from the schools is very great to reduce the algebra further or to eliminate it altogether. This pressure is prompted in a very large measure by the objection which girls have to the courses. On the positive side, courses in household science and household art are becoming well-nigh universal. These courses are seldom taken by the boys, and the result is a growing consciousness on all sides that a differentiation between the courses offered to boys and girls is not only legitimate, but in increasing degree demanded. While the girls are engaged in the cooking and the sewing courses, the boys are taking mechanical drawing and shop courses of various types.

EDUCATION SHOULD BE ADAPTED TO THE VOCATION.

The segregation of the sexes is a matter of secondary importance, however, in the face of that most vital problem in American education, namely, the problem of adapting education to the future occupation of the student. A few years ago one heard the statement repeated with great show of belief that society as a whole could not be expected to pay for an individual's education if he wanted to prepare for a profitable trade. Society paid only for culture or in general for nontechnical forms of knowledge. We now recognize that the State will pay for anything that trains its children. The chief question now is what will best train children. The problem of industrial education has thus come up in a new form, in a form which may be described by saying that we are now discussing the purely educational question, What is best for the individual and for the State? To be sure, the economic problem of paying for

this best training is not met, but the State admits the principle that in some way the cost of education must ultimately be met. The prominent question now is what kind of training is demanded.

It would be difficult to condense into a limited report any adequate statement of what is done in the high schools of the United States in the effort to solve the problem of vocational courses. Perhaps it will not be amiss to hazard the statement that every possible experiment is being made. Separate high schools for agriculture and for shopwork are in existence. Every possible shade of combination is being tried, from the high school that offers one textbook course in agriculture, or one shop course in woodwork or sewing, to the most elaborate cosmopolitan programs in which every type of shopwork is given a place beside the conventional subjects of the classical curriculum. A survey of the situation at the present moment offers no ground for safe prognostication as to the final solution. There are strong partisan opinions in favor of the one or the other type of organization. The lay members of society who have to do with the government of schools through their membership on school boards are quite as likely to have strong partisan attitudes as educators are. Parents interested in their children in these schools, and the commercial world, which is ready to adopt the product of school training—all are partisan and often dogmatic in their views. Fortunately for the ultimate organization of schools, there is no dictator whose voice in this matter is to be final. The principle is clear, high schools must work out a group of courses that shall suit the needs of children. These courses will be manifold in content and in mode of administration. The concrete courses are evolving in an unsettled school system which is expanding at a most extraordinary rate. The final expression of the principle may safely be left to the future, when the partisan debates of the present will undoubtedly be taken up into a form of organization broad enough to satisfy all the legitimate demands which each party advocates. More specific statements as to tendencies are hardly safe. They would be colored by views which would undoubtedly seem to some reader dogmatic.

CONTROL OF OUTSIDE ACTIVITIES.

The lengthy survey under the third head of matters relating to the course of study leads to a fourth general subject of discussion, namely, the subject of outside activities. High schools are social centers in every community. In some communities the emphasis upon athletic activities, clubs, dances, parties, and the like, has tended to eclipse the social possibilities which naturally arise in the course of class work. A generation ago athletics, parties, clubs, etc., found little or no place in the public high school. There was, perhaps, a debating club, and there were a few evening gatherings,

but no such intense outside life as is now common. To some observers the development of outside activities seems like an imitation of college life. The causes must, however, be sought in something more fundamental than mere imitation. One imitates only that toward which he is predisposed and for which he is partially prepared. If high-school students imitate college activities, it is because these activities supply a congenial outlet for energy which is present and not otherwise used.

Whatever the source of these outside high-school activities, one general fact is evident to everyone who studies the situation. These activities have in many cases passed reasonable bounds, and in some way or other high schools must absorb the time and energy of students in more profitable ways. The most aggravated perversion of high-school energy is in the direction of the organization of secret societies. Several States have attempted to eradicate these secret societies by general legislation. In other cases boards of education without the sanction of State law have passed rules prohibiting secret societies, on the ground that they are a menace to the school. Drastic pledges have been formulated and presented and in some cases even signed. The net effect of all this effort at repression has been relatively small. In many centers the organizations continue even after all these steps have been taken. Of late a new element has been injected into the situation. The college fraternities and sororities, finding that public objection to the high-school organizations is beginning to involve their interests also and that State legislatures are showing a disposition to deal with both high-school and college fraternities in the same prohibiting statute, have taken steps to warn high-school graduates that college fraternities will not elect to membership those who have been members of illicit high-school organizations. Whether this step, taken by several college fraternities, will be effective or not remains to be seen. There can be no doubt that college fraternities are more fully informed about high-school fraternities than high-school faculties are. If, therefore, a vigorous campaign should be waged by the college fraternities, there would be more information to start with than is now commonly at hand.

The question arises, however, What would the high school face next if it did suppress secret societies? It is quite certain to be called on to face excessive emphasis of athletics. There are indications now that athletics have gone as far as they ought to go, at least in their present form. Interschool games, generated by an undue eagerness for gate receipts and a pseudo-enthusiasm for the school, are already too distracting in many quarters.

EXTEND THE ACTIVITIES OF THE SCHOOL.

The solution of this whole problem undoubtedly lies in the enlargement of the activities of the school. Several schools have wisely provided for the organization, under the sanction of the school itself, of a great deal of outside work. In some cases this work is very closely allied to school work. Thus boys are given supervision and credit for gardening, and even for more ambitious agricultural work. Students who have some talent for music are encouraged to take music at home or in voluntary after-school classes. The publication of a school paper, the continuation of shopwork after regular school hours, the opening of a school study room in the evening are all forms of outside activity which are promoted with success at different centers. In some cases the lines of activity cultivated are more remote from the school work. Thus the Boy Scout movement is organized, and various expeditions are undertaken into the country for camping purposes. Or the girls are organized into Campfire Girls' clubs.

One school at least has made a successful effort to stimulate a new and productive type of outside activity by organizing the whole community so that it contributes to the school's music and art. The students find these activities calling for a type of energy sufficiently different from that drawn upon in routine class work that the additional work serves as genuine recreation. At the same time the training derived is closely related to the regular school work. It is certainly desirable that the social activities of the school should take on this dual character of furnishing at once training and secondarily recreation.

Each of these experiments which substitutes some positive kind of organization for that to which objection has been raised shows clearly that what high-school students need is more to do. Compared with the boy or the girl who goes into business at the end of the elementary school course, the high-school student has a very light program. Various causes have operated during the past 10 years to make the program lighter rather than heavier. The elective system has tended to reduce somewhat the strenuousness of courses, both because the instructor is disposed to make a bid for numbers by not giving a course so heavy as to repel students of average ability, and also because the student can, through the exercise of his rights of election, select courses which are easy for him. The newer subjects which have come into the curriculum are sometimes less well organized than the older subjects and lacking, therefore, in content or in compactness. These and other causes have tended to make it easy for the student to get through high school with a relatively small expenditure of energy on his regular class work. The tendency to take up outside activities appears in direct proportion to the reduc-

tion in the severity of regular work. Those who find in this situation a fortunate broadening of the student's opportunity and those who view with pessimistic alarm the increase of outside engagements are both clear that there is here a grave problem in school organization. If the outside activities are to be an advantage, they must be organized, and they must be selected so as to aid rather than distract from the class work. If, on the other hand, the outside activities become excessive, there should be substitutes and a proper control which can bring the student back to the class work.

ADVANTAGES OF A LENGTHENED SCHOOL DAY.

One remedy which is more discussed than tried is the lengthening of the school day. As suggested above, shopwork out of regular hours and study out of hours, but under the school roof, have been tried with success in a number of centers. But there is objection to the actual extension of the school day, because, in the first place, it would tax the instructors too heavily and, secondly, because in most high schools the students often have to go long distances in order to reach school. It may be said in answer to these objections that an arrangement which gives a long school day does not necessarily involve full attendance during the whole session on the part of each member of the teaching staff. Nor does the special student who makes a long trip to reach school necessarily need to spend all the hours of the session in the school. These matters being adjusted, as they easily may be, there is much to be said in favor of a longer supervised period of school activity. A longer day would make it possible to put physical activity on a proper basis as a part of the supervised educative work of all students. It would give larger opportunity for supervised study and it would give much needed administrative relief in organizing individual curricula by distributing electives over more recitation periods. When one attempts to include all that is suggested as desirable in the school, there can be no doubt that the lengthening of the school day is theoretically the simplest first step in the solution of the problem. It will require time, however, to achieve such a solution. Most principals and boards would hesitate under present conditions to urge such a step, and most faculties would find reasons apparently based upon sound educational considerations for rejecting the proposal if it were made.

In the meantime there are two indirect methods of extending school supervision over outside activities, both of which have been tried with gratifying success. In the first place, the school can supply in a greater degree than is usual supervision for a great variety of activities. In athletics the schools have commonly recognized the necessity of supplying a supervising instructor. The voluntary devotion of individual instructors has often furnished supervision for

clubs or other outside activities. The investment of supervisory energy in these student activities is becoming more and more common and is undoubtedly a justifiable charge against the instructorial budget of any school. As this demand comes to be recognized, there will grow up a class of teachers skilled in the type of supervision which is needed. Their work with students will practically extend the school day, even if that step is not formally taken.

A second type of organization which has been successfully carried out is one in which the student systematically lays out his program for the whole day and thus extends the period of regulated work and recreation by organizing his own personal program. This adjustment can best be carried out by providing each student with a program card for the day and by discussing with him from time to time the economy of a well-ordered expenditure of time. The program should make liberal allowance for recreation and should thus emphasize the value in individual development of systematic recreation. It should also leave to the student margins for self-directed intellectual activities. In short, it should be something more than a school program. If students can thus be induced to take charge of their own programs, much will be gained without enlarging at all the school equipment. The danger is that only the better students will have the strength of purpose to carry out such programs.

The discussion of outside activities, like the discussion of the fuller curriculum, brings us to the conclusion that the high school can never go back to the simple program of a generation ago. Those who would repress outside school activities make the mistake of regarding them as unnecessary funguslike growths to be cut off This is an untenable view of these activities. They are here as part of the expansion of high-school life and they must be recognized and controlled. Some legitimate occupation must be found for the abundant energies of students.

One phase of the general movement toward the extension of school activity which may properly be mentioned in this connection is the increasing practice of supplying students with luncheon. All of the newer and better types of high-school buildings are providing a luncheon room. This room is sometimes used as a laboratory for the department of domestic science. This ideal arrangement does not in other cases seem possible, when the enterprise is let out by contract to a manager. There is great need of more adequate preparation of managers for school luncheon rooms. Also there is need of a keener recognition on the part of local authorities that the conduct of such a room should be in the hands of a well-trained officer, who can make the luncheon room contribute to the sound social and scientific spirit of the school.

ALL-THE-YEAR SCHOOLS ARE DEMANDED.

In connection with the discussion of the lengthening of the school day, reference must be made to the lengthening of the school year. Serious summer study has become a familiar fact in the lives of many teachers. There is a feeling on all sides that vacations are excessive, and that the student loses too much by the long suspension of activities. Among that class in society which can afford to go to summer camps it is becoming a common practice for both boys and girls to seek during the summer a type of outdoor education that the regular school could hardly furnish. The great majority of city students, however, are cut off from such camping opportunities on any large scale. The question is coming to be more and more commonly asked, Why not keep schools open during the summer? In the meantime the demand for longer school sessions has become very loud on the part of students who have failed in one or two subjects and find themselves in danger of being failures. Summer high schools are, as a result of all these demands, beginning to appear. At the present stage these schools are usually of a special type, offering a limited number of courses, mostly of a manual nature or especially adapted to the needs of those who have failed. In a few centers the summer school is becoming regular in its offerings. There can be no doubt that this will become more common as ways and means are found.

NIGHT SCHOOLS OFFER A FIELD FOR DEVELOPMENT.

Another extension of the high school is into the night school. In a few conspicuous centers the policy has been definitely adopted of offering a broad course during the evening. In general, however, the night school is not regular in its work. The night school is usually a place for adults who have not had full school opportunities, or it is an aggregation of special industrial classes. The work is frequently not graded either as to the qualifications of the members of the class or with a view to distinguishing sharply between elementary work and secondary work. Finally, attendance is not so satisfactory as during the sessions of the regular school. All these irregularities show that the night school has not been fully organized. Somewhat more rigorous modes of administration have proved to be effective in foreign centers, and there will doubtless come a period in American organization of these additional schools when they will become somewhat more regular in form and in student body.

THE TRAINING OF SECONDARY-SCHOOL TEACHERS.

No survey of the secondary-school situation would be complete without a discussion of the training of teachers. In all English-speaking countries the training of secondary teachers has been allowed

to drift on without any special provision and for the most part without any supervision whatsoever. In this respect the United States, with England and Scotland, compare very unfavorably with France and Germany, where the training of secondary teachers is more fully provided for than the training of elementary teachers.

The neglect of the training of high-school teachers is historically connected with the fact that these schools grew up without supervision. The colleges were the real supervisors of the high schools until very recently, and the colleges were satisfied to send their graduates into the high schools as teachers without questioning seriously their ability to teach. It is interesting to note, in passing, the obvious historical fact that the colleges exhibited very little confidence in these graduates after they became high-school teachers. The colleges for a long period dictated in truly paternal fashion every step that the high-school teacher should take. The high-school teacher in turn, feeling very little responsibility for the organization of curricula and having no special training in the history of education and little knowledge of the problems of school organization, was proud of his detachment from pedagogy and somewhat scornful of his colleagues of the elementary schools, who frankly absorbed themselves in discussions of method.

As pointed out above, the evolution of the high school has brought out its problems with such clearness that secondary teachers have been forced to take up pedagogical consideration. In the meantime State departments have developed far enough to see that if an elementary-school teacher needs to be licensed to teach and needs supervision, at least during the early years of his work, the secondary teacher certainly requires equal attention. Colleges have come to recognize that the strong high school will grow up where there is a strong staff of instructors alive to the problems of the school and not acquiescing in the dictates of an external institution. Therefore the wiser colleges are striving to raise in the minds of the high-school teachers, both in service and in preparation, a realization of the problems of high-school organization. Finally, the demonstrated efficiency of those schools which manage themselves on scientific principles has opened up an era of study of high-school problems which arouses in the mind of the scientific student of education the most optimistic hopes for the future of the training of high-school teachers.

THE TENURE OF TEACHERS IS TOO SHORT.

In the midst of these optimistic views it must be admitted that there is the shadow of pessimism when one studies the present situation as it really appears when examined in detail. A recent study made by Prof. Jessup (School Review, October, 1913) shows that high-school teachers are a most migratory class. Not only the teach-

ers, but also the principals of high schools, change with a frequency which almost destroys the hope of developing anything like a definite policy within these institutions. This transient character of the high-school instructorial staff is understood when one considers, first, the lack of special training, to which reference has just been made. The second fact which explains the situation is the lack of appreciation on the part of communities of the advantage to the school of continuity in educational policy. Boards of education are themselves in many cases very transient, and they add to their own short term entire willingness to make experiments with new principals and new teachers. All these causes result in the migration which Prof. Jessup so vividly portrays. Finally, there is the more general fact that many teachers are engaged in the work for only a few years between college and some other calling. Some of the annual changes are accordingly to be understood as complete withdrawals from the teaching profession.

Whatever the causes—and the above list is doubtless only a partial one—the result is most disastrous for high-school education. It is very often the experience of a high-school student passing through a single school that he will be under from two to four principals and will have even in the same subject a great variety of different types of instruction. If one could be sure that each change experienced by such a student is in the direction of improvement, there might be complacency about the matter, but a succession of reforms which are unfinished experiments at all stages is not likely to be altogether in the direction of improvement.

DEPARTMENTS OF EDUCATION IN COLLEGES.

The lack of proper training among high-school teachers and their short tenure of office are part of the general problem created by the rapid development of secondary schools. Whatever contributes to a better organization of these schools will contribute to a solution of the problem of supplying better teachers. If the high school can be better defined and its work systematized, the reflex influence of these improvements will immediately be felt in the longer tenure of teachers and in a higher type of professional spirit and performance. The same agencies which are operating to improve high schools through a better definition of their problems are contributing to the better preparation of high-school teachers for their professional work. Conspicuous among these agencies are the departments of education in the State universities. The large responsibility of the State university for all forms of education in the State has long been recognized in the established systems of high-school inspection. In a number of States the inspector is a man of very large influence.

Where the work of the inspector is guided by a clear insight, emphasis has been laid upon the training of teachers and their distribution through the schools. This has led to the development of strong departments for the training of teachers.

The example of the State universities in this respect has prompted all colleges to take up very generally the organization of departments of education. In some cases this imitation has been of a rather remote and ineffective type. Courses are sometimes announced for teachers which differ only in their announcement from the conventional course offered to other students. Thus one finds that a course in algebra for teachers is nothing but an ordinary course in higher algebra. A course in history for teachers includes no mention of any principles of method. It is a course in that period of history with which the school courses deal. Perhaps the efforts of colleges to meet the demand that they train secondary teachers ought not to be criticized in spite of the superficial way in which the work is sometimes done. It is a new undertaking, and as such is sure to show some marks of immaturity.

One great defect in most institutions which aim to train secondary teachers is the complete lack of facilities for giving the student any practice teaching. The German system provides for a long period of instruction in the duties of classroom management as an essential part of the training of every secondary teacher. There are very few institutions in this country equipped even to afford adequate opportunities for observation to those who are preparing to become high-school teachers. In this matter there must undoubtedly be general improvement. The institutions which train elementary teachers have always recognized the imperative necessity of practical contact with the classroom as a part of the equipment of every teacher in training. Colleges will have to recognize the same fact if they are to give adequate preparation to high-school teachers.

NORMAL-SCHOOL TRAINING FOR SECONDARY TEACHERS.

In this connection it is important to discuss the fact that a number of normal schools in different parts of the country have taken up the problem of training high-school teachers as a part of their work. There is indeed no agreement among the principals and the teachers of normal schools in this matter. There are strong partisans of the view that it is the sole business of the normal schools to train elementary teachers. Probably the majority of the officers of normal schools hold to this view in more or less pronounced degrees. On the other hand, there are partisans, some of them most emphatic in their expressions, of the view that only the normal school can give satisfactory training to secondary teachers. Those who hold to this

latter position point to the fact that the normal school is historically the only institution in the country which has aimed to deal with the teaching problem. They point to the fact that through all the generations the secondary schools have been manned by teachers untrained in the practical side of their work, and finally they point to the present training given in departments of education in colleges and universities and criticize this kind of training as purely theoretical, unaccompanied by practice teaching or criticism.

It should perhaps be added that practical school superintendents emphasize the importance of training received in the classroom as more desirable than the theoretical training given in educational lectures. Where normal-school graduates have been brought into comparison with graduates of colleges in high schools which appoint both on their faculties, the advantage has sometimes been reported to be with the normal-school graduates. The normal schools have thus gained in some quarters the support of school superintendents in the contention that these schools can prepare teachers quite as well as colleges, if not better.

There is no immediate prospect that the normal schools will be able to take up in any general way the work of training high-school teachers. If there were no other consideration in the way of the normal schools in this field of operations, the fact that there are at the present time no adequate facilities in any of the States for the training of elementary teachers would settle the matter. The example of the few normal schools which do train secondary teachers will in the meantime serve as a stimulating example to the college departments, which have up to this time unquestionably been open to the just criticism that they are too abstract and theoretical.

A final matter which has been brought out in recent reports is the matter of the distribution of a trained teacher's energy over a great variety of unrelated subjects. The extreme phase of the evil which is suggested by this statement is the case of the teacher who is trained to teach one or two subjects and is drafted off when he begins his work into subjects for which he has no training. It is not uncommon for the teachers of physics and of Latin to be assigned for their unoccupied time to teach classes in history or English. In the small schools such a mixing of subjects is inevitable. The secondary assignments ought to be made, however, with due regard to efficiency.

On the other side, teachers ought to be trained with the facts fully in view. In this matter many college departments have a lesson to learn. The college department which requires two-thirds of a student's time for a given specialty fails to prepare that student for the real position which he will find open to him when he begins to teach. The high schools are very seldom as highly specialized as the

colleges and not even remotely like the universities in this respect. Departments in universities can with advantage study the actual demands made upon their students after graduation. The professor of mathematics or physics or Latin will then realize that he is making a very inefficient teacher by encouraging too high a degree of specialization.

A NEW ERA OF PROFESSIONAL ADMINISTRATION.

It remains to comment briefly on the fact that in secondary schools, as in other branches of the educational system, there is a clear recognition of the new profession of administration. Formerly a school was supposed to run itself, if only the classes were held. From time to time some matter of discipline might so disrupt the work of the school as to call for special attention, and then there was an emergency officer who could be called in. The second stage of evolution was reached when, in the complex organization of the school, some one had to be appointed to settle all matters not settled in the separate classrooms. This central officer usually found that the purchase of supplies and the conciliation of parents are the chief matters not attended to in the classroom. Often a community has suffered because a competent teacher has been taken away from his professional work of instruction to carry on the clerical work of an office. Even in this second period there were administrators who found time for the study of students, of teachers, of courses of study, of other school systems, and of like stimulating subjects. Such true administrators found themselves limited, however, because the information which they needed was not easy to get and the methods which they had at hand were altogether inadequate as methods of administrative study.

A new era of administration is at hand. The best example to select for purpose of illustration is, perhaps, the example of school grades. The time was—and now is in many quarters—when a school grade was almost impossible of interpretation except to the initiated. A certain instructor gave a student the mark 90. No one could understand this mark unless he knew whether the teacher was a "hard" marker or an "easy" marker. To-day the progressive high-school principal has in the simple method of distribution tables a means of objectively checking up each teacher's practice. Furthermore, each school has the possibility of comparing its methods with those of other schools, including the colleges to which some of its graduates go.

Some administrators are adopting an analytical method of dealing with the grades of students. Instead of a formal percentage mark, they are filing a report from each teacher which describes such matters as the student's devotion, or lack of devotion, to the preparation of his work, the student's willingness to receive and profit

by criticism, his readiness of reproduction of what he has learned. This effort to analyze the psychology of the individual student may be recognized as the administrative side of the general movement, described in an earlier paragraph, toward more careful supervision of class study. When the high-school world is supplied with a body of empirical results, based upon a careful study of the best methods of recording students' work, the position of the professional administrator will be fully justified.

To be sure, there is some hesitation on the part of the school boards to invest very much public money in what they often regard as useless research. But studies of elimination, of relative grades, of the standings of graduates in college, of the effects of vocational guidance, of the influence on attendance of new curricula, will soon produce a body of objective, standardized knowledge regarding secondary schools which will convince the most skeptical. The creation of this type of knowledge in high-school offices is no less significant a development than the general expansion of the secondary schools and the enlargement and organization of their curricula.

CHAPTER VI.

PROGRESS IN CITY SCHOOL SYSTEMS.

By James H. Van Sickle,

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Contents.—I. Administration. II. Measuring the school's efficiency. III. Departments of educational research and efficiency bureaus. IV. Professional investigations. V. Scope and character of surveys already made. VI. The consulting psychologist. VII. The visiting teacher. VIII. The health of school children. IX. Instruction in hygiene. X. The course of study. XI. Vocational guidance. XII. Classification and promotion. XIII. Departmental teaching in the grades. XIV. Conditions affecting the work of teachers.

I. ADMINISTRATION.

The tendency toward centralization in school administration, noted in previous reports, shows no signs of abatement. Reduction in size of school boards, appointment or election at large, instead of by wards, the employment of business experts, and the extension of professional control on the educational side are policies that are commanding increased attention and gradually but surely gaining recognition as fundamental in education.

Recently in Chicago the superintendent of schools tendered her resignation on account of committee interference in professional matters for which the community has come to expect the superintendent to be responsible. An aroused public opinion was followed by the filling of vacancies in the board by members favorable to the superintendent's initiative in all educational policies and the board thus constituted refused to accept the superintendent's resignation. Thus was the modern principle of professional control in educational matters validated in our second largest city.

The board of education of Jackson, Mich., has this year withdrawn all salaries from its own members and officers. These salaries have heretofore amounted to from $1,500 to $3,000 per year, depending upon the amount of work required of certain committees. The board has now adopted the policy of having all work possible done by paid employees who are not board members. By cutting off all remuneration from its membership the board is free to legislate on all matters without the possibility of anyone charging any member with being influenced by selfish considerations or personal interests.

It was the idea that membership on the board should be looked upon solely as a service to the community.

In St. Louis it has been necessary within the year to get a legal opinion upon a question involving the exclusive charter right of the superintendent of schools to initiate educational measures, but in that city the opinion adverse to the right of nonprofessional initiative was apparently accepted as final and no legislative action has been sought looking toward the removal of the safeguards against lay interference embodied in the charter of 1909.

OPINION OF THE ATTORNEY ON POWERS OF THE SUPERINTENDENT OF INSTRUCTION.

I herewith submit my opinion on the power of the board to adopt and to put into effect the resolution offered by Dr. J. P. Harper at the May meeting of the board. That resolution had for its object a material change in the organization of the teaching force and would have had an important bearing on the conduct of the schools. Its adoption was sought without regard to the opinion or recommendation thereon of the superintendent of instruction. The question is: Has the board, as distinguished from its superintendent of instruction, the power under the law to deal with such a question as this? What are the relative rights of the board and its executive officers, particularly its superintendent of instruction?

Reference to sections 11029 et seq. of the Revised Statutes of Missouri, 1909, being the charter of the Board of Education of the city of St. Louis, will quickly dispose of the question. At the very outset, in section 2 of the charter (sec. 11030, R. S. Mo., 1909), it is provided:

Every city in this State now having or which may hereafter have five hundred thousand inhabitants or more * * * shall be and constitute a single school district, shall be a body corporate, *and the supervision and government of public schools and public school property therein shall be vested in a board of 12 members* * * * *and in a superintendent of instruction and a commissioner of school buildings.*

Thus, in the very section of the act creating the board and dealing with its powers and duties, the legislature expressly states that the government of public schools and public school property shall be vested not in the board alone, as might be supposed, but in the board *and* in the superintendent of instruction and commissioner of school buildings.

But by section 7 of the act (sec. 11035, R. S. Mo., 1909) the powers of the superintendent of instruction and his duties and obligations are specifically set forth and defined. There it is provided the superintendent shall nominate his assistants. The number of them and their salaries are to be fixed by the board, but who they shall be is determined by the superintendent, and not by the board. * * * The section closes with the provision that the superintendent "shall be responsible to the board for the condition of instruction and discipline of the schools."

Under the provisions of the charter, the board of education, as distinguished from its executive officers, is given exclusive authority over the expenditure of public money for school purposes. * * * It is charged with the responsibility of securing the best qualified experts available to carry on the work of public education and then is under the obligation to supervise the work of such experts and to see to it that they are performing their duties adequately and efficiently.

But it is obvious that by virtue of the provisions of the statutes above quoted, the organization of the teaching force of the public school system is entirely under the supervision and control of the superintendent of instruction, and any change therein can be made only when recommended by him. If the board of education, as distinguished from its instruction department, were to exercise such power as was

attempted to be invoked by the resolution under consideration, it is conceivable that a situation might easily develop wherein the superintendent of instruction, an expert chosen by reason of his peculiar qualifications as an educator, would be without any voice in the organization of the teaching force, and consequently, without any power or control over the organization of the instruction and of the discipline of the schools, and yet, by reason of the express provisions of the statutes, be still chargeable with the responsibility for the proper conduct of the schools. * * *

This is the most vital and most important feature of our charter, and is the feature that distinguishes it from the school law which preceded it, and from school laws generally existing throughout the country at the time our charter was adopted. * * *

That this view of our school law was well understood and acknowledged by those interested in its enactment is abundantly demonstrated, not only by the testimony of its framers and advocates, but also by contemporaneous publications discussing and analyzing the new legislation. * * * A society was formed called the Civic Federation, whose sole object was to draft a new school law and to bring about its enactment by the General Assembly of Missouri. * * * There were people and publications, of course, who were opposed to the bill which this committee prepared and which the Civic Federation induced the legislature to adopt. That these opponents of the measure recognized and acknowledged the great power and independence given by the new law to the superintendent of instruction is seen in the articles appearing at the time in the St. Louis "Mirror" which gave much space to criticisms on this very point. * * *

And that the great power and independence of the superintendent of instruction are not an unforeseen and accidental result of haphazard legislation, but were deliberately planned and intended by the framers of the law, is equally discoverable from the newspapers and periodicals of the time. Members of the Civic Federation committee testify with positiveness and pride that this was the chief end they as a committee unanimously worked to accomplish. The view of these framers of our charter was reflected in an article published in 1903 in the "Educational Review." * * * The article appears in volume 26, pages 464 et seq., and was written by Mr. Edward C. Elliot, one of the leading members of the St. Louis bar. * * * Not only does it make clear the relative rights, duties, and powers of the board and its executive officers, but it also brings out most conspicuously the great advantage to the school system of St. Louis resulting from the scheme of school administration established by our charter:

"The fundamental principle of the St. Louis law lies in the centralization of the administrative functions in expert school officers, while the supervisory control is left to persons elected by the people, but not specially qualified in the various departments of educational work. To attain the efficiency of one man, together with the wisdom of a larger number, not impairing either quality by the intermingling of their duties, is the new element of discovery, if such it may be called, in connection with this law.

* * * * * * *

"The business of the schools is divided among four departments, over each of which is an officer appointed by the board. These officers are known as 'Superintendent of Instruction,' 'Commissioner of School Buildings,' 'Secretary and Treasurer,' and 'Auditor.' The law defines the qualifications, which are such as specially fit the officers for their respective duties. Their terms of office are fixed, and they can be removed by the board only upon a two-thirds vote and for cause. Immediately upon their appointment they become to a great extent independent of the board and directly responsible to the public."

In 1905, Boston reduced the number of members of its school committee from 24 to 5. Persistent attempts have been made, one within the year, to increase the membership, but so far without avail. In other cities which have reduced the size of their school boards, there appear to have been no serious attempts to return to former conditions. In the list of cities that have reduced the size of the school board are: Perth Amboy, N. J.; Naugatuck, Conn.; New Orleans, La.; Lynn, Mass.; Covington, Lexington, Newport, and Paducah, Ky.; and Newton and New Bedford, Mass. Under the commission form of government, Chattanooga, Tenn., has one commissioner of education instead of a board of education. Stockton and Sacramento, Cal., and Salem, Mass., have changed from the district with large board to a commission form with five members. The Kansas State Legislature two years ago enacted a law providing for boards of education composed of six members in all cities of the first and second class, that is, all cities of 2,000 population or more. The State of Ohio has this year enacted a law which limits the size of school boards in all cities of the State. Boards in cities of less than 50,000 inhabitants will consist of not less than three nor more than five members elected at large; similarly in cities of 50,000 to 150,000 inhabitants the minimum number of members will be two and the maximum seven; in cities of more than 150,000 inhabitants the corresponding limits on membership are five as a minimum, seven as a maximum. All cities in Pennsylvania, except Altoona and Wilkes-Barre, have reduced the size of their school boards under the provisions of the new State code. In every case the smaller board has been more efficient and business has been transacted more promptly and with less friction. The New York City school board still consists of 46 members. Recently the two experts who were employed by the board of estimate to investigate the organization, status, and procedure of the department of education, Prof. Goodnow, of Columbia University, and Dr. Howe, of the People's Institute, have announced their findings and recommendations:

The board of education is acting upon the false conception of its proper powers and functions. Instead of confining itself to the larger problems of legislation and surveillance contemplated for it by the charter and dictated to it by all considerations of efficiency, it has attempted to intervene either as a whole or through standing committees in the overwhelming mass of minute details involved in the administration of the department.

The board should divest itself of all its purely administrative functions.

It should abolish its present committee organization.

It should be reduced in size. The charter should be amended to provide that the board shall consist of eight members, three of whom shall represent the city at large and shall have three votes each, and the remaining five of whom shall be appointed, one from each of the five boroughs, with the members from Manhattan, the Bronx, and Brooklyn having two votes each and the members from Queens and Richmond having one vote each.

The experts state that this reorganization along these lines would promote facility in handling the larger affairs and problems of the board of education, and would place the purely detailed matter of administration upon the school and supervising authorities.

It is not always the big city that needs to have its school administration simplified. Among the cities that have new charters Schenectady, N. Y., furnishes a striking example of what to avoid in charter making. The school board of this city furnishes the taxpayers with the following information:

The Schenectady public schools are conducted under a special school charter which became effective May 23, 1908. This charter provides for a board of education of five members, appointed by the mayor. The term of three members expires one year, of two members the next, and so on alternately. In this way each mayor, elected for two years, has the power to appoint an entirely new board of education.

The charter defines the powers and duties of the board, making both positive and negative provisions.

Positive provisions.

The board—

1. Elects annually one of its members president.
2. Elects annually a secretary who shall not be a member of the board.
3. Elects a superintendent of schools for an indeterminate term.
4. Appoints clerks, attendance officers, physicians, nurses, teachers, etc.
5. Prescribes the courses of study, textbooks, and all apparatus of instruction.
6. Adopts rules for the general management of the schools.
7. Recommends the purchase of land for school sites.
8. Recommends the erection of new buildings.

Negative provisions.

The board—

1. Shall not appoint school janitors.
2. Shall not control the janitors.
3. Shall have no voice in determining when school buildings shall be altered or repaired.
4. Shall have no power to prepare plans or draw up specifications for new buildings.
5. Shall have no power to fix salaries of any employees, whether clerk, nurse, physician, teacher, principal, or superintendent.
6. Shall have no power to expend money, but all purchases shall be made by the commissioner of public works.
7. Shall have only limited powers of contract.
8. Shall own nothing, sell nothing.

By charter provision, therefore, the commissioner of public works transacts the following board of education business:

1. Appoints janitors.
2. Defines the duties of janitors.
3. Transfers janitors.
4. Determines when repairs shall be made and decides what these repairs shall be.
5. Prepares plans for new buildings and writes specifications for the same.
6. Expends all the money in the board of education budget except teachers' salaries.

The board of estimate and apportionment transacts the following board of education business:

1. Fixes all salaries of janitors, nurses, physicians, teachers, principals, superintendent.

The board of aldermen control the following board of education business:

1. Purchase of school sites by recommendation of the board of education.
2. The alteration of old buildings.
3. The erection of new buildings.

The board of contract and supply transacts the following board of education business through the commissioner of public works:

1. Makes all purchases amounting to more than $250 and writes the specifications for the articles purchased, such as pianos, scientific instruments, manual-training equipment, school furniture, library books, textbooks, etc.
2. Makes all contracts and writes the specifications for the same, such as building constructions, ash collections, etc.
3. Sells school properties when authorized by the board of aldermen.

In contrast with this complex administrative scheme, that provided for the Pittsburgh school system under the new Pennsylvania Code is impressive in its simplicity.

The city of Pittsburgh was constituted a city of the first class by the enactment of the school code May 18, 1911. Under the new law, which became operative in November of the same year, the entire management of the public schools of Pittsburgh and the former Allegheny school district is vested in a body of 15, who are appointed by the judges of the courts of common pleas for a term of six years, and who are collectively and officially known as the board of public education. The secretary, who is not a member, is the board's general executive.

The board of education has three standing committees—finance and administration, property and supplies, and instruction.

The school controller, elected by the people as the city controller, approves all financial orders authorized by the board not contrary to law and audits all accounts of the board. The school treasurer receives all funds belonging to the district and pays out the same on proper orders approved by the school controller.

The superintendent of buildings has general charge of all matters pertaining to the physical school plant, including construction, repairs, permanent equipment, and operation. The superintendent of supplies is the general purchasing and distributing officer of the board and has charge of all material duly authorized for the various departments in school operation.

The superintendent of schools is the educational head of the school system and is elected for a term of four years. He is empowered to recommend to the board all subordinates in his department, plan and supervise their work, and shape the constructive policy of the schools. In the general supervision he is aided by one associate superintendent and four assistant district superintendents. The individual school, with its corps of teachers under a principal, constitutes the unit in local management.

II. MEASURING THE SCHOOL'S EFFICIENCY.

The attempt to establish definite standards of efficiency is as new in the business and industrial field as it is in education. Mr. Taylor began his experiments at the Midvale Steel Works, in the system now known by his name, fully 20 years before he was ready to announce his plans, and in all probability another 20 years will have passed before the Taylor System will have made converts of a majority

of employers and employees in the industrial field. The efficiency expert has the task yet before him to fully justify his existence to the satisfaction of the average business man, the manufacturer, the employee, the board of education, and the teacher; but unquestionably he is making progress. His task is probably more difficult in the educational field than in any other field in which he is at work, because education is so much a matter of the spirit. However, there is a statistical side that admits of definite formulation, and there is a business side which can just as advantageously be subjected to scrutiny as the corresponding features of a strictly business enterprise. Then too, of late, the expert is finding ways of measuring the accomplishments of children in the subjects that are taught in the schoolroom. The work of Stone and Courtis in arithmetic, the scales for measuring the quality of handwriting by Thorndike and Ayers, and the scale for measuring English composition by Hillegas, are already well known and widely used.

Three methods of measurement have been used in school investigations—measurement by personal opinion, measurement by comparison, and measurement by standards or units. Prof. George Drayton Strayer, in his report to the National Council of Education, on "Standards and Tests for Measuring the Efficiency of Schools or Systems of Schools," characterizes these three methods as follows:

> Educators and laymen have always expressed opinions with respect to the efficiency of our schools. In recent years there has been developed, along with a refinement in the technique of investigation in education, a remarkable public interest in the attempts to evaluate our educational practice. School inquiries, investigations, or surveys have been conducted, or are planned, in a great many cities throughout the United States. In each case there is the supposition that such an inquiry or investigation will measure the efficiency of the schools. It has not always been clear, either to those making the survey or to those who read the reports, that three distinct types of measurement have been employed or three sets of standards of tests applied. It is possible to characterize each investigation, or each part of some of the larger surveys, by one of the three following methods of measurement: First, measurement by personal opinion; second, measurement by comparison; or, third, measurement by more or less well-established standards or units.
>
> Measurement by personal opinion is valuable in just the degree in which the person passing the judgment is, by training and experience, qualified to give an intelligent opinion. Such personal judgments have frequently suggested comparisons with other communities, and have at times, no doubt, been based upon more or less well-established standards. The chief characteristic of this type of report, however, is found in the fact that the author does not feel that it is necessary either to appeal to a painstaking comparison with other similar situations or to state the standards which he uses in passing his judgment. Often the individual who is expressing a personal opinion seeks to give dignity to his statements by saying that he speaks in terms of facts. In effect, his argument is that the situation as he sees it, and as he has described it, leads inevitably to a conclusion with respect to the strength or weakness of the school system that has come under his observation. Of course, no such appeal to facts can modify the situation. Unless careful comparisons have been instituted, or commonly accepted standards applied in passing the judgment, the opinion

expressed in the light of the so-called facts which have been discovered remains simply an opinion.

Measurement by comparison is based upon the fundamental idea that the common practice is the result of the judgment of many men who have attempted to solve the same or very similar problems. In reports which have used the method of measurement by comparison, the most common practice is used as the standard to which each local situation is referred. Such comparisons have been made with regard to expenditures, the progress and classification of children through the grades of the school system, the amount of time devoted to school subjects, supervisory provision, teacher training, tenure, and the like. In the derivation of standards of efficiency it will always be necessary to employ the comparative method. Any adequate derivation of standards will, however, involve much more than comparison. Measurement in any field is not successful merely because we are able to say that one quantity is more or less than another. It is only when we have a measuring stick which enables us to describe all of the quantities with which we deal in terms of definitely determined units that we can claim to have any adequate method of measurement.

We are only beginning to have measurement undertaken in terms of standards or units which are, or which may become, commonly recognized. Such standards will undoubtedly be developed by means of applying scientifically derived scales of measurement to many systems of schools. From such measurements it will be possible to describe accurately the accomplishment of children and to derive a series of standards which will be applicable to varying groups of children and to different social demands.

III. DEPARTMENTS OF EDUCATIONAL RESEARCH AND EFFICIENCY BUREAUS.

For several years throughout the United States there has been an attempt to standardize annual school reports so that any school system could compare its problems and results with those of other school systems. One who remembers the school reports of 10 years ago can not fail to be impressed with the progress that has been made in recording and analyzing records of enrollment, attendance, foreign parentage of pupils, ages of pupils in each of the grades, the number of pupils who left school during the year and the causes, together with other data of great significance. Even greater progress has been made in the standardization of school accounting. The uniform system recommended by the Bureau of Education has been adopted by nearly all of the larger school systems.

School superintendents appreciate the necessity of making studies on the basis of fact furnished by significant educational data and of knowing the cost of each feature of the enterprise for which they are responsible, but they find that if they deal effectively with this important feature of school administration, they must perforce neglect other features of their work no less important.

The solution proposed and actually put in operation in several cities is the organization of all work of this sort for the school system into a department. New York City is to have a "Bureau of reference and research," Baltimore has a "Bureau of statistics and

research," New Orleans has a "Department of educational research," and Rochester, N. Y., has an "Efficiency bureau." The president of the board of education of Rochester explains the need to be met by the bureau, as follows:

A business corporation has always the tangible control of loss or profit to check expenses and measure efficiency. A municipal corporation has no such tangible control. The importance, therefore, of a system and method of accounting that will clearly interpret to the taxpayers the cost of the various functions of the school work, and give such comparative records as will test in great measure the efficiency and the proper cost of such functions, is most important. A part of the work of the efficiency bureau has been the installation of a new accounting system, which is based upon the principle of appropriating definite portions of school money for definite phases of educational expenditure, in contradistinction to the plan of appropriating a lump sum for all school costs to be subdivided according to the subsequent demands of the various activities. For some years Rochester has been moving from the old time lump-sum budget to the fully analyzed functional budget.

Under the educational division of the work of the efficiency bureau there are grouped three departments: First, a bureau of information to take care of every inquiry coming to the department within and without the city, without encroaching on the valuable time of high-salaried office heads; second, a bureau of statistics to gather and publish school facts and figures as the demands of the public, board of education, and the officers of the business and educational research, in which the special educational problems of the Rochester school system may be worked out for the benefit of the public, without hindering the usual progress of routine duties or incurring neglect of one educational activity by reason of overattention to another.

The director of the bureau adds details, some of which we quote:

Every school system is continually involved in the preparation of reports. The various members gather data for the city superintendent, who for the city as a whole assembles material for the State and Federal Departments. In a modern city school system this reporting assumes such proportions as to require a special place and a special agent to receive, check, and file the documents from schools and offices. Rochester needed an office where this work could be performed without converting the city superintendent and other office heads into clerks from time to time.

Conditions in individual schools must be brought to the attention of the superintendent and supervisors. To accomplish this, all incoming reports must be scrutinized and from the total a digest must be prepared of such points as require the judgment of the superintendent or other office heads. Otherwise these administration officers would spend more time in determining where to act than in actual administrative duties. Rochester needed an office to study, analyze, and present local situations to the proper authorities.

After conditions had been brought to the superintendent's attention, the central office often sends reports to each school showing the principal the standing of his school compared with the average for the entire city. Rochester needed an office to do this work without interrupting or crowding out the necessary work of office heads.

In addition to bringing delinquent schools to the standard of the city, the superintendent is expected to keep the whole system up to the standard generally attained throughout the country. Rochester needed an office to measure the work of the city with that of the country at large.

Progressive superintendents, supervisors, and principals not only keep alive to educational achievements throughout the country, but from time to time also desire to make independent or original investigations in their particular fields of work.

Rochester needed an office to conduct such research work without the suspension of the regular duties of those desiring the information sought.

An intelligent interpretation of school accounts is only possible by the reduction of cost figures to a per capita basis. These computations often require quite intricate registration and attendance statistics, which lie entirely without the province of the bookkeeper. Rochester needed an office to translate the secretary's account books into per capita units.

Generally frequent and always urgent are the calls for emergency services of stenographers, clerks, draftsmen, and messengers. Rochester needed an office to perform this rush work without resorting to outside hour-by-hour service or the employment of supply teachers.

ORGANIZATION.

These needs were presented to the board of education in the course of the work of installing new and revised educational records in the several offices of the department. The result was that on January 1, 1913, a permanent bureau of school efficiency was authorized by the board and made one of the regular administrative offices of the system.

The functions of the efficiency bureau correspond to the needs already described, and are:

(1) Receiving and keeping on file all reports of enrollment, attendance, and progress of children in the schools.

(2) Analyzing reports received.

(3) Presenting salient features to supervising officers.

(4) Reporting situations to individual schools.

(5) Measuring the efficiency of local educational work with that of other cities.

(6) Conducting research work.

These functions are performed through the services of: One director, one of the assistant superintendents of schools; one stenographer, acting as head office clerk; one stenographer; two card and record clerks.

The office records, as far as possible, take the form of standard-sized cards. All forms and blanks are reduced to letterhead size. Computations are made with the adding machines and slide rule, and business-office methods are employed.

The files of the efficiency bureau contain the following information, by months:

(1) For each school, grade, and special class: (*a*) Enrollment from September to June; (*b*) month-end register; (*c*) attendance.

(2) Elimination from school by permanent card record: (*a*) Causes; (*b*) grades; (*c*) ages; (*d*) months; (*e*) schools.

(3) Progress through school for each school and grade: (*a*) Double promotions; (*b*) single promotions; (*c*) trial promotions; (*d*) nonpromotions; (*e*) final result after trial period; (*f*) examination results; (*g*) progress charts of schools and individual classes showing rapid, normal, and slow progress combined with under, normal, and over age.

(4) Contributions of teachers and principals who have visited schools elsewhere.

(5) Replies to all questionnaires and other inquiries about Rochester schools since January, 1912.

(6) Superintendents' reports from other cities, State and Federal educational bulletins, and other educational periodicals.

(7) Newspaper clippings on educational matters.

(8) Results of researches and surveys.

(9) Blank forms and sample records of other cities.

(10) Inventory of equipment by schools.

(11) Per capita cost of each school, department, kind of educational work, etc.

(12) Special file of net enrollment from January to December for city appropriation basis.

The New Orleans idea of employing a "special investigator" is based upon conditions similar to those which have called forth the establishment of the efficiency bureau in Rochester. The functions of the city school department have become so inclusive, and its problems so complicated and so varied, that there is ample room for men who will devote their entire time to study and research. At the same time modern educational science has grown so much in content, and modern educational endeavor is so diverse that no superintendent can be expected to attend to the duties of his office efficiently and expeditiously and find time to "keep up" with all the movements in school administration. It is just here that the trained "investigator" can be of immense service in weighing and measuring new ideas, in comparing conditions, in studying products, and can present to the superintendent and the school board, in carefully digested form, the results of his studies.

Supt. Gwynn, of New Orleans, reports as follows:

In order to secure standards for more effective measurement of schools and school activities, in May, 1913, the school board established a department of educational research. There has been placed in charge of this department a university professor who is a trained psychologist and trained in the methods of research. He is now employed by the board for his full time. He has been given clerical assistance and during the present school session attempts will be made through collection of data and giving of tests to establish different norms for the measurement of school efficiency.

The department operates under the following rules:

DEPARTMENT OF EDUCATIONAL RESEARCH.

Section 1. Purposes. The aim of this department will be to extend the methods of scientific research to the various problems that arise in the administration of a city public school system. The specific activities of the department will be determined by the needs and problems as they may appear. Among these specific problems will be included vocational surveys for the guidance of trade and industrial education; standardization of tests and indices of school efficiency; extent and causes of retardation and repeating; exceptional children; and a hygienic survey of school buildings.

Section 2. Control of department. This department shall be a division of the department of superintendence, and shall be under the immediate control of the superintendent.

Section 3. Personnel of the department. The board of directors shall appoint a director of the department of educational research and such assistants as the board may deem necessary.

Section 4. Duties of the director. The director shall make such researches and reports as may be required by the board or the superintendent. It shall also be the duty of the director to give lectures or courses of lectures to students in the normal school and to teachers.

In his last report, Supt. Spaulding, of Newton, Mass., makes the following statement on efficiency in school management:

> The progressive improvement of a school system demands that these essentials of scientific management be applied incessantly: The measurement and comparison of comparable results; the analysis and comparison of the conditions under which given results are secured—especially of the means and time employed in securing given results; the consistent adoption and use of those means that justify themselves most fully by their results, abandoning those that fail so to justify themselves.
>
> The measurement of measurable educational results by suitable standards need limit those results to the dimensions of the standards no more than the measurement of a child's height limits his growth to the dimensions of the yardstick.

The city of Newton has no formally organized efficiency bureau, yet the annual report for 1912 well exemplifies the principles the superintendent has laid down with regard to the essentials of scientific management as applied to schools.

The last Rochester report includes an exceedingly suggestive chapter descriptive of the activities of its efficiency bureau. The Newton report for 1912 is the best example of careful analysis of statistics and expenditures that has come to hand from any city not maintaining an efficiency bureau.

IV. PROFESSIONAL INVESTIGATIONS.

The reports of the work of efficiency bureaus will be awaited with much interest. Their function in part is that of a continuous survey. A single survey made by experts within or without a given school system can at most only set forth the historical development of the system, its present condition, and the direction in which it is moving. Often a survey sets forth only the second of these three items, namely, the present condition of the system examined. This, if carefully done, is often of great service to the community, but no single survey can perform the function of the continuous survey carried on by a permanent bureau within the system.

This has been a notable year in respect to the number of surveys made, and it is evident that many more will be made within the next few years; but the need of a continuous survey within the system itself is not yet fully realized by school boards. There has been so much criticism of the schools, some fair and some unfair, that many school boards and the public which they represent, feeling some uncertainty as to the real condition of the schools for which they are responsible, naturally seek the best estimate they know how to command.

Two years ago the National Council of Education took note of the increasing tendency to institute surveys and appointed a committee of five to study and report upon the question, "By what standards and tests may a school or a system of schools be judged?" The

report of this committee, made at the Philadelphia meeting in February, 1913, by its chairman, Prof. Strayer, led to the formation of a larger committee to continue the study of the problem. This committee numbers 15. The members are: Prof. George Drayton Strayer, Teachers College, New York, chairman; Prof. Paul Hanus, of Harvard University; Dr. F. E. Spaulding, superintendent of schools, Newton, Mass.; Dr. J. H. Phillips, superintendent of schools, Birmingham, Ala.; Miss Adelaide S. Baylor, assistant superintendent of schools, Indianapolis, Ind.; Dr. William H. Maxwell, city superintendent of schools, New York City; Prof. Edward L. Thorndike, Teachers College, Columbia University, New York; Prof. E. P. Cubberley, Leland Stanford University, California; Prof. C. H. Judd, University of Chicago, Chicago, Ill.; Hon. C. N. Kendall, commissioner of education of the State of New Jersey; Miss Katherine D. Blake, principal of public school No. 6, New York City; Mr. Ben Blewett, superintendent of schools, St. Louis, Mo.; Prof. E. C. Elliott, University of Wisconsin, Madison, Wis.; Mrs. Ella Flagg Young, superintendent of schools, Chicago, Ill.; and Mr. James H. Van Sickle, superintendent of schools, Springfield, Mass.

One of the first tasks undertaken by this committee was the formulation of principles which should guide in conducting school surveys. The principles adopted by the committee are as follows:

A school inquiry should be described in such terms that the community will recognize that it is supplementary to the regular supervisory machinery in the schools. In general in the large systems it is best for the superintendent's office to secure from the board of education the necessary funds to maintain a bureau or department of special statistical information and special tests whereby the efficiency of the school system may be reviewed at all times in a way which will add to the routine reports and the routine observation possible under the usual organization that now exists. In small systems and in all systems on special occasions this will not be possible. Therefore other measures must be adopted.

Where any special questions arise calling for expert knowledge which can not easily be supplied by the superintendent or school officials, as for example, in the matter of architectural plans, in the matter of expert revision of accounting systems, and in cases where new and elaborate subjects are to be introduced into the curriculum, as, for instance, industrial education, art education, and commercial education, the community should be led to recognize the fact that it is wise to bring in specialists who can advise the superintendent's office and the board in these particular matters. Such specialists should make a careful examination of the whole community, including the facilities which are offered for the special type of work that is needed, also discovering the difficulties, if any exist, in the introduction of the new subject. The survey in this case might be termed a general economic survey of the whole community with reference to a special school subject.

Where the superintendent or the lay members of the school administration feel uncertainty with regard to any phase of the school work, it ought to be possible, without embarrassment to the officers of the school system, including the superintendent, to bring in competent persons who can supplement the routine observation of the schools and confirm or modify the recommendations that are under consideration. Such persons constituting a survey committee ought to be recognized by the com-

munity as a temporary extension of the supervisory machinery of the school. In special cases a survey can be resorted to as a means of deciding points which are under dispute. Thus it is easily conceivable that several members of the board of education would not agree with regard to the wisdom of certain policies under consideration. They ought to be brought to recognize the value of advice from representatives of the educational profession outside the particular school system in question. The community and the educational profession should be educated to recognize that consultation is not a reflection upon the efficiency of the superintendent, board of education, or members of the teaching staff, but rather a recognition of the teaching profession as a large and complex group, the members of which are capable of supplementing each other, even where there is not absolute agreement on methods of procedure.

Temporary additions to the supervisory staff in the fashion above described are justified by the fact that schools are continually facing administrative emergencies for which it is not necessary to provide permanent additions to the staff. Furthermore, these temporary situations very frequently call for a broader view than can be supplied by a single supervisory officer. The teaching profession itself needs the kind of opportunity which would be furnished by such surveys to enlarge its own views and to try out many of the experiments which are necessary in order to secure the best adjustment within the complicated school situation.

The superintendent very frequently needs the support of the general educational profession to make a community clearly aware of needs which he sees, but which the community is slow to recognize. For example, he frequently needs more funds than he can easily obtain without the cooperation of some outside advice for the benefit of the community itself.

Finally, the community may be in doubt as to the efficiency of its school officers. When criticism has once become the fashion in a given community it is very likely to undermine the efficiency of the school system, and the superintendent ought to welcome some type of investigation which will either give him the support which he needs in dispelling the criticism or give the community the suggestions which it needs in order to cure the situation.

From the above discussion it will be seen that a survey can be most advantageously initiated by the school officials. If the citizens wish to have a survey made, they ought to be able to secure it through their regular representatives on the board. Groups of citizens who can not get it through the board should be provided with means of carrying out a survey. Furthermore, the superintendent ought to be in a position at any time to call in impartial professional advisers in case he finds school interests seriously jeopardized. Whether the investigation originates with the superintendent or board or interested groups of citizens, its purpose should be to protect and advance the interests of the children and youth of the community.

An inquiry will naturally aim to deal with those phases of school organization which are capable of exact objective review. Thus the financial management of the school should be taken up. The physical equipment of the school should be examined. The attendance on schools, including the question of enforcement of the compulsory attendance laws, can be definitely known. The number of children in a given classroom should be ascertained; the provisions that are made for exceptional children, including defectives.

The method of training teachers, their qualifications, the method of their appointment, and the method of getting rid of inefficient teachers, should be investigated. Their salaries and the rules governing their tenure of office, the provisions that are made for the improvement of teachers during the period of their service, should also be investigated.

The organization and functions of the supervisory staff and the efficiency with which they carry out their work, especially with reference to their contact with the classroom exercises.

The efficiency of instruction: This will include an examination of the course of studies and the time devoted to each one of the subjects in the course of study; the methods of class instruction, including the variations in these methods which are to be observed in the different parts of the system. There should also be made an examination of the provisions which exist within the system for recording the individual history of children as they pass through the grades.

Any report concerning school conditions should be so planned and arranged as not to mislead educational officers or the public concerning the general and special methods of any important feature of the work of the schools within its scope; for example, if the scope of the inquiry includes the work of the department of physical education, and if the physical growth of pupils is below what should be expected, while the moral and social atmosphere of the school playgrounds is admirable, the latter fact should be made as clear as the former. In general certain topics should be chosen for measurement and report, and the result should be reported in the case of each such topic without selection for purposes of the support of any interest within or without the school.

Any school inquiry should, so far as is practicable, observe, measure, and report the conditions of the community's political, industrial, social, and educational life which favor or interfere with the work of the schools.

If the community can afford it, the survey should be made by a committee of two or more persons. This committee should invite and secure cooperation of the teaching staff.

Investigators should dwell upon the achievements of the school system, especially noting the direction in which it is moving.

The report should be prepared as a document intended for the information of the school officials. The further use of the report should depend upon the agreement of these school officials and the surveyor who is employed by the board. If the report is to be published, agreement should be reached in this matter at the time when the survey is first organized. In every case there should be an explicit understanding between the parties as to the method of treating the report. In the absence of such a specific agreement before the report is prepared, publication should depend upon explicit agreement between the parties involved.

V. SCOPE AND CHARACTER OF SURVEYS ALREADY MADE.

Two educational surveys have been referred to in previous reports of this bureau, the Baltimore Survey, which was made in 1911, and the New York Survey, which has been completed during the present year. All of the city surveys so far made which are accessible will be briefly summarized. The descriptions which follow are based on statements prepared for the Committee of Fifteen on "Standards and Tests" by Prof. Charles H. Judd, the secretary of the committee.

THE FIRST BOISE SURVEY.

During one week in November, 1910, Supt. Calvin N. Kendall, at the request of the school board and the superintendent, made a survey of the schools of Boise, Idaho. The report was published in a local newspaper, the Idaho Statesman, on December 18, 1910. It deals with (1) school buildings, (2) teachers, (3) course of study, (4) organization of schools, and (5) attitude of the community. The facts on which conclusions are based were collected through six days of personal observation. There are no tables in the report. Recommendations based on personal observation are made, and the report concludes with a brief statement by the superintendent to the effect

that board action was taken along the various lines recommended. The report is favorable and the recommendations are all in the direction of enlargement: Enlargement of the staff; enlargement of the course, especially by including more industrial courses; enlargement of the organization by adding ungraded classes. The report is six pages in length.

THE MONTCLAIR SURVEY.

In May, 1911, Prof. Paul H. Hanus reported to the board of education of Montclair, N. J., on the schools of that city. The report deals with (1) general survey, (2) teachers and teaching, (3) program of studies in (*a*) elementary schools and (*b*) high schools. The report was printed in a pamphlet. The body of the report is 21 pages in length and contains numerous tables and reports of personal observations, the latter apparently based on four days of visiting in the schools. Criticisms are made in detail and numerous recommendations are made.

The tables include: (1) A table of marks in the high school, comparing Montclair grades with those in other high schools; (2) a table of time distribution of subjects in grades, comparing Montclair and Newton, Mass.; (3) general tables of retardation, average ages and reasons for leaving school; for one school a full detailed table of ages and a table of nationalities.

The recommendations on course of study are specific and detailed. The criticisms on general organization are based on the tables. The high school is criticized in its material equipment and in its course of study.

Prof. Hanus notes explicitly at the end of his report that he has laid stress on what seemed to be the shortcomings of the Montclair schools and not on their many obvious merits.

THE BALTIMORE SURVEY.

In June, 1911, a commission consisting of Commissioner E. E. Brown, Prof. E. P. Cubberley, Supt. C. N. Kendall, with two assistants, namely, Messrs. N. B. Hillegas and Harlan Updegraff, rendered a report to the board of school commissioners of the city of Baltimore on the schools of that city. The report was published as Bulletin No. 4, Whole Number 450, of the United States Bureau of Education. The body of the text contains 102 pages. A summary of 8 pages precedes the detailed tables and reports and presents the findings of the commission. The body of the report consists of five chapters. Chapter I (6 pages) describes the plan and history of the survey itself. Chapter II (26 pages) gives a history of the Baltimore school system and an outline of the social and legal relations of the system. Chapter III (44 pages) deals with the following topics: (*a*) System of supervision; (*b*) teaching force and its training; (*c*) the elementary curriculum. Chapter IV (10 pages) deals with the physical conditions in the schools. Chapter V (9 pages) deals with various general topics.

The text includes numerous tables and charts. In many of these charts the Baltimore schools are compared with schools in the other leading cities of the United States.

This report contains much matter dealing directly with the problems of administration and supervision and with the criticisms of the administration. It is evident from the whole tone of the report that the commission was expected to pass judgment, either favorable or unfavorable, upon the administration.

In point of method it may be noted that comparison with other cities is much emphasized. Personal inspection is recorded as having been made in one-half of the schools and in 250 classrooms. The statement regarding the scope of the report is especially full and suggestive for the use of those engaged in the study of surveys (pp. 18–19).

The report is fully indexed.

THE EAST ORANGE SURVEY.

During the autumn of 1911 Prof. E. O. Moore prepared for the board of education of East Orange a report on the schools of that city. The report was printed in a pamphlet of 64 pages early in 1912. Prof. Moore reports that he visited all of the classrooms in both elementary and high schools, talked with most of the teachers and supervising officers, examined the pupils in grades 5, 6, 7, and 8, and consulted with citizens. The report contains the following sections: (1) Historical sketch; (2) relation of school to community; (3) board of education; (4) cost of schools; (5) general survey; (6) teachers; (7) a new course of study; (8) the high school; (9) summary of recommendations. The text contains tables, several comparing the schools of East Orange with those of other systems. The text is somewhat more general than that of other reports, making excursions into the general field of educational theory and urging conformity in the schools to the general principle that schools should train in thinking rather than in a set amount of subject matter. The report has the form of an appeal to the general lay reader, though in the discussion of many topics, such, for example, as the subjects of instruction, detailed descriptions of the desirable requirements are given. The tone of the report is not severely critical, though numerous recommendations for enlargement of the schools are made.

HIGH SCHOOL NEEDS IN HARRISBURG, PA.

In May, 1912, Dr. Henry Snyder, superintendent of schools in Jersey City, reported to the school board of Harrisburg the results of his inquiry into the high-school situation in that city under the following points:

(1) The present needs of a new high school; (2) whether there is need of one or two; (3) the location or locations; (4) the accommodations and facilities that should be provided to meet modern educational ideas and demands; (5) the probable cost of the project, not including sites and furnishings; (6) the probable length of time that such building or buildings will meet the high-school needs of the community.

THE GREENWICH EXHIBIT.

In June, 1912, the Russell Sage Foundation brought to its consummation at Greenwich, Conn., an educational survey which is unique in its mode of presentation. The technical details of this survey are nowhere apparent. An educational exhibit was presented to the citizens of that city and a pamphlet of 24 pages was distributed. This pamphlet gives pictures, diagrams, and maps setting forth vividly the needs of improvement. There are pictures and charts which show the respects in which other school systems are superior to those of Greenwich.

THE BRIDGEPORT SURVEY.

During February, 1913, Supt. J. H. Van Sickle, of Springfield, Mass., reported to the board of education of Bridgeport, Conn., his findings on the schools of that city. The report is printed in a pamphlet of 129 pages. Mr. Van Sickle had the assistance of Dr. Leonard P. Ayres, of New York; Dr. H. S. West, of Cincinnati; Mr. Wilbur F. Gordy, of Hartford; Dr. Andrew D. Edson, of New York; Mr. E. E. MacNary, of Springfield; Mr. E. Hebden, of Baltimore; and Mr. E. H. Webster, of Springfield.

The report consists of (1) preliminary comments and recommendation (6 pages); (2) a financial study of the system (19 pages); (3) distribution of pupils (10 pages); (4) the city normal school (10 pages); (5) the high school (8 pages); (6) the industries of Bridgeport and industrial education (16 pages); (7) special subjects: History, English, and a series of tests in arithmetic (47 pages).

The report contains numerous comparative tables. It is based partly on observations, partly on an analysis of comparative tables, and partly on the result of standard tests. It frankly emphasizes the points in which the schools are found to be defective,

at the same time giving credit for good results achieved under adverse conditions. The demand for more investment of public funds in the schools is presented in such a way that the lay reader would be able to understand the comparisons. The rest of the report is more in the form of a technical report useful to school officers. The paragraphs on the industries and vocational education are full and emphatic and ought perhaps to be described as popular in form. They are based on a study of the local industries and industrial conditions.

THE SECOND BOISE SURVEY.

In February, 1913, a commission consisting of Profs. Edward C. Elliott, Charles H. Judd, and George Drayton Strayer undertook at the request of the board of education of Boise, Idaho, a second survey of the schools of that city. The report is a pamphlet of 31 pages. The following are the section headings: (1) Scope of examination (half page); (2) the course of study (2 pages); (3) supervision (2 pages); (4) the teaching staff (2 pages); (5) classification and progress of children through the school system (3 pages); (6) parks and playgrounds (1 page); (7) the school plant (1 page); (8) expenditures (9 pages); (9) cooperation of the community with the public schools (2 pages); (10) report on instruction as observed.

The report was based on material accessible in the office of the superintendent and on observation. There are comparative tables. In tone the report is commendatory, with numerous suggestions for enlargement of the school system. In form the report is intended for the lay reader.

THE COHASSET SURVEY.

In May, 1913, at the request of the school committee, Supt. F. E. Spaulding undertook a survey of the schools of Cohasset, Mass. The purpose of this survey was to aid the school authorities to make the Cohasset schools as good as the best in the State. The report, covering something more than 20 typewritten pages, has not been published. It contains recommendations for radical and far-reaching changes in the school system, from the kindergarten, not then in existence, through the high school.

THE NEWBURGH SURVEY.

The survey of the Newburgh public schools is a part of a survey of social conditions in Newburgh, N. Y., made by the Russell Sage Foundation and published in June, 1913. The report is a pamphlet of 104 pages, 15 of which are devoted to schools. The following topics, under the heading "School credits and school needs" gives a clear view of the scope of the survey, its spirit, and its plan.

SCHOOL CREDITS.

Among the things found worthy of special commendation are:

I. A school board which has given, free of charge, much time and thought to school matters.
II. An unusually fine school building—the Broadway School.
III. Well-kept buildings, showing efficient janitor service.
IV. But little class overcrowding, save in the academy.
V. A well-equipped manual-training school.
VI. The promise of installation of courses in domestic science.
VII. A teaching force apparently devoted to its work.
VIII. Good cooperation with parochial schools in the enforcement of the compulsory education law.

SCHOOL NEEDS.

I. Improvement of the physical provisions for children in the way of lighting, air space, ventilation, cloak rooms, toilet facilities, and fire protection in old buildings.
II. Placing the detailed work of school administration more largely in the hands of the superintendent.

III. More frequent and adequate advising with the teachers regarding textbooks, changes in the curriculum, daily and term programs, etc., and at the same time more thorough oversight of their work.
IV. Increasing teachers' salaries, and adopting better methods for their selection and promotion, and for studying and improving their efficiency.
V. Making continuous studies of school efficiency for the purpose of locating and correcting weaknesses in the system.
VI. Making special provision for mentally and physically abnormal children.
VII. Establishing evening schools for foreigners and others who need special opportunities.
VIII. Greater provision for the physical training of children.
IX. Opening school buildings out of school hours for wider civic and social uses.

Comparisons are made between the expenditures for schools in Newburgh and other neighboring cities of similar size, and ingenious graphic illustrations are used which the layman can readily understand.

THE NEW YORK SURVEY.

From time to time during this and the previous year sections of the report of this survey prepared by individual investigators have appeared under the title, "Interim Report."

The New York survey had its origin in the board of estimate and apportionment, through a resolution adopted by that body on October 26, 1910. The investigation was begun in June, 1911, under the direction of Dr. Paul H. Hanus, professor of the history and art of teaching in Harvard University. The list of assistants and quotations from Prof. Hanus's conclusions of the report as a whole have been given in a previous report. (Report of the Commissioner of Education, 1912, Vol. I.)

In showing what the schools should accomplish, Dr. Hanus suggests the usual purposes of public school education, and adds the following, which recent changes in our economic life have made desirable:

Public education should strive to render each pupil economically intelligent and efficient. It should direct each pupil's attention to a vocation to which he may reasonably aspire—that is, every pupil should be led gradually to realize that a suitable vocation, accessible to him and adapted to him, is indispensable to a useful and happy life. As he approaches the end of his school career, whatever his age may be, he should come to see that his vocation will be not only the means of satisfying his personal wants and ambitions, but because it is the chief means of establishing significant relations between himself and his fellow men. It is also the source of such public service as he is capable of and may be called upon to render. Public education should, therefore, provide for the development of vocational purposes based on vocational enlightenment (vocational guidance); and it should offer each pupil appropriate training for the vocation of his choice.

The following is the summary by the committee of school inquiry of the board of estimate of the principal recommendations and constructive suggestions upon which the school investigators are generally agreed. This includes the ideas of the Hanus commission and Prof. Frank J. Goodnow and Dr. Frederic C. Howe, who put in a supplementary report on organization and methods of the board of education.

1. The course of study in all schools should be organized about human problems and made simple and elastic enough to permit differentiation to meet the needs of different nationalities and groups.
2. The content of the course of study should be made as practical as possible, and special attention should be given to the development of commercial, industrial, and vocational subjects emphasizing the larger and more important aspects of industrial and commercial activities.
3. The board of education should take necessary steps to effect the gradual elimination of teachers of special branches.
4. Each school as a neighborhood center should ally itself with neighborhood interests and take cognizance of local needs.
5. The board of education should make a careful investigation whether cosmopolitan or composite high schools offering several different courses of study or small high schools with differentiated curricula should be developed.

6. The board of education, through the proposed bureau of investigation and appraisal or other bureau, should establish a fact basis for its educational, administrative, and financial work.

7. The board of education's attendance department should adjust its work so as to maintain discipline and control school attendance without resorting to police methods in checking truancy.

8. The educational administrative work of the department of education should be reorganized.

9. The board of education should carefully supervise the operation of heating and ventilating systems installed in the different public-school buildings.

10. A comprehensive plan should be worked out for the wider use of school buildings for purposes of recreation, for public assemblage, and for civic and social gatherings.

11. The different administrative departments and bureaus of the department of education should be reorganized.

12. The accounting system of the board of education should be so adjusted as to make possible the fullest segregation of disbursement accounts along functional lines, properly correlated with allied statistics, and their publication at least quarterly.

13. The board of education should provide for the collection and tabulation of all current data needed in order to enable it to know in advance what additional seating capacity is actually required throughout the city.

14. The permanent census board should be utilized by the board of education and should eventually be transferred to the board of education.

15. The board of education should be reorganized and its membership reduced from 46 to 8, with 16 votes as now distributed in the board of estimate and apportionment.

THE PORTLAND SURVEY.

On the invitation of the board of directors of the Portland, Oreg., schools, a survey of the schools of that city was undertaken in April, 1913, under the general charge of Prof. Elwood P. Cubberley, of Leland Stanford University. Others who took responsible parts in it were: Supt. F. E. Spaulding, of Newton, Mass.; Supt. J. H. Francis, of Los Angeles; Dr. L. M. Terman, of Leland Stanford University; Dr. Fletcher B. Dresslar, of the United States Bureau of Education; and Prof. E. C. Elliott, of the University of Wisconsin.

The resolution adopted by the Portland school board, under which the survey was conducted, is as follows:

Whereas it is of the utmost importance that the public schools should be kept at the highest point of efficiency, it is hereby declared to be the sense of this meeting that a full and complete survey be made of the public school system of this district, comprising the location, type, character, and conditions of existing schoolhouses, and the estimated cost and type of future buildings; of the organizaton and method of administration; of the form and manner of instruction; the courses of study and quality of text-books; the extent and need of school playgrounds and gymnasiums; the development of domestic science, manual training, trade, agricultural schools; the salaries of teachers and other employees; the method and system of accounting; the form of organization; and the examination of the school laws of the State as applied to this district; of the average cost per pupil in comparison with other large cities; and of the scientific method of raising the required revenue, either by direct taxation or by the issuance of bonds, or by both.

The report has been completed, but at this date (November) copies are not yet available.

THE KANSAS CITY SURVEY.

An educational survey, with a view to simplifying and revising the entire curriculum of the Kansas City, Mo., schools, has been decided upon by the board of education. Authority has been given to Supt. I. I. Cammack and his assistants to conduct the survey.

The first step was taken at the October meeting of the board, when it was decided to employ W. W. Charters, dean of the department of education of the University of Missouri, to superintend the revision of the study of language in all the city schools. A further survey of the entire course of studies of the schools is to be made by the superintendents and, in special instances, by experts employed from the outside.

Surveys Made by the New York Bureau of Municipal Research.

1. THE SYRACUSE SURVEY.

The survey of the schools of Syracuse is a part of a double survey of the department of health and the department of education made in May, 1912. The report is made to the associated charities of Syracuse and appeared in a typewritten manuscript of 52 pages. The report deals with physical conditions, inadequacy of records, overcrowding of schoolrooms, and need of higher minimum and maximum salaries for teachers, the need of larger playgrounds, the need for more special classes, and the need of prevocational and industrial training.

Purposive publicity is recommended and more extensive cooperation of outside civic interests with the schools. The report is organized to show (1) significant facts, and (2) constructive suggestions for correcting the defects noted in the preceding significant facts.

2. THE WATERBURY (CONN.) SURVEY.

The survey of the schools of Waterbury is a part of a survey of the organization and business procedure of all city departments made for a committee of business men by the New York bureau of municipal research in April, 1913. The three-day survey of the schools was made by Dr. Horace L. Brittain. A condensed statement of his findings, occupying 14 pages, is printed by the bureau. Four pages are devoted to conditions favorable to efficiency. These are discussed under the following heads: Administration, construction, and sanitation, textbooks and course of study, and outside cooperation. Six pages are devoted to defective conditions easily corrected by slight changes in administration. Three pages are devoted to defective conditions requiring increased appropriations, such as more adequate physical examination of children, remodeling buildings to insure safety and improve sanitary conditions, the need of facilities for technical instruction in high schools, clerical assistance to principals, etc. Statutory enactment to give greater permanency to school board membership is recommended.

3. THE ATLANTA SURVEY.

The survey of the schools of Atlanta is part of a double survey of the department of health and the department of education, made in December, 1912. The report is made to the chamber of commerce and appeared in a pamphlet of 44 pages, 24 of which refer to schools. The report on schools deals with the physical conditions, with administrative organization, and with observations or so-called "field observations" made in the schools. There are several tables on retardation, and examples of record sheets which are recommended.

4. THE ST. PAUL SURVEY.

The survey of public schools of the city of St. Paul was undertaken in February, 1913, at the request of a committee of citizens, who defrayed the expenses of the survey. The survey falls into three sections: (1) A section dealing with the financial records of the board of education and the disbursement of funds; (2) a section dealing with the organization of the office of the superintendent; and (3) a section dealing with the organization of instruction in the schools. The first section points out the difficulty of extracting from the present books of the board of education any accurate figures with regard to different types of instruction and the cost of different phases of the work of the schools. A series of detailed recommendations for changes in the accounting system was made, most of which are features of the system of accounting

recommended by the Bureau of Education. The office of the superintendent is severely criticized because it is deficient in clerical assistance and because the physical conditions did not seem satisfactory to the surveyor. With regard to instruction, a series of concrete examples is given of poor work in the schools. The report after it was prepared was submitted to the board of education and was published in sections in the public press of the city. The report is an appeal to the citizens of St. Paul for very radical changes.

SPECIAL INDUSTRIAL SURVEYS.

The following surveys have been made, or are under way, with the purpose of discovering the relations which exist or which might be established between (*a*) school work, (*b*) the child or the youth who is about to enter into vocational life or in whom the vocational motive is clearly developing, and (*c*) the possible vocational opportunities which are open to such child or youth:

Cincinnati.—Through the Schmidlapp Bureau and its own system of granting work and schooling certificates and of requiring attendance in continuance schools.

New York.—Through the vocation guidance survey, Miss Alice F. Barrows, director.

Philadelphia.—Through the public educational association, James S. Hiatt, secretary. See Report 1911–12, "A Year of Cooperative Service for the Schools," and a paper by James S. Hiatt, "The Child, the School, and the Job."

Cleveland.—The Cleveland chamber of commerce requested the Young Men's Christian Association to establish an experimental vocational bureau. A general committee of citizens was formed and this committee determined to organize an "institute" of 100 members which should make a thorough investigation of the subject. Mr. Oscar M. Miller is secretary of the institute.

At the same time a committee of the Schoolmasters' Club of Cleveland and vicinity was appointed to recommend a plan for vocational guidance. This committe reported on April 12, 1913. The report emphasizes the necessity for gathering much more detailed information regarding actual needs and conditions.

Buffalo.—The Buffalo chamber of commerce determined to promote some plan for vocational guidance in Buffalo, and engaged Mr. Eli W. Weaver, of Brooklyn, N. Y., to conduct a survey in that city.

Minneapolis.—A citizens' committee representing philanthropic, manufacturing, labor, and educational interests, assisted by the Teachers' Club, made a survey of 352 boys and girls selected as representative of the children who left school four years ago and at that time were between 14 and 16 years of age. A trained investigator made a thorough canvass of the home and work conditions of these children, and of the personal progress and status of the children themselves. A report embodies the information secured and 10 recommendations. It was printed in the daily papers.

VI. THE CONSULTING PSYCHOLOGIST.

More than 20 years ago, at a meeting of the National Council of Education, Prof. Royce, of Harvard University, made a prediction which at the time seemed unlikely to be verified, namely, that the time would come when no school system would be regarded as properly equipped to do its work without the employment of an officer whom he termed a "consulting psychologist." Few who heard Prof. Royce on that occasion realized the need which he so clearly portrayed, and his words were not taken overseriously by some of the superintendents present. But his prediction has come true, and one of the most significant tendencies in school management at the

present time is that toward a scientific inventory of the human material with which the teacher has to deal. Prior to 1900, school-attendance laws were either nonexistent or indifferently enforced. Children not fitted by mental constitution for school work as then organized early disappeared from the school enrollment and in that way ceased to be a problem to the school management. The school was a selective agency; it retained those who were by nature fitted to deal with abstractions, and it let the object-minded and the mentally deficient drift away to obtain their preparation for life as best they might outside the school. Doubtless the improvement in compulsory-attendance laws, and their more rigid enforcement, by which varied types of intellect demand courses of study and methods of teaching to meet their widely varying needs, is in large measure responsible for this comparatively new movement in school administration. For some years past, under varying names, this officer, termed by Prof. Royce a consulting psychologist, has been an indispensable assistant to the superintendent wherever employed. His work is sometimes organized into a department of child study, as in Chicago; a psychologic clinic, as in Salt Lake City and Los Angeles; or a psychological laboratory, as in Hartford, Conn., and Springfield, Mass. But under whatever name this department is known, its function is practically the same. The head of the department is a trained psychologist. He deals with mental deviation from the normal as the physician deals with physical deviation from the normal. He diagnoses the case and prescribes the remedy. Few school reports for the current year, issued in cities of 10,000 or more inhabitants, omit mention of provision for mentally exceptional children. Such children are often physically exceptional as well, and are in need of the services of the physician, the nurse, and the dentist. Quite generally throughout the United States children who are mentally or physically subnormal or morally delinquent are taken out of the regular classes and taught in more or less definitely classified groups under conditions that promise most for their normal development. The names that are applied to these abnormal groups are so various as to be confusing. Standardization here is of importance in order that reports dealing with special classes may be understood.

In September, 1913, the following designations for special classes were formulated in Philadelphia, in terms descriptive of the aim of the work rather than in terms of the characteristics of the children themselves:

CLASSIFICATION AND GRADING OF PUPILS IN SPECIAL CLASSES IN PHILADELPHIA.

As a result of the conferences on special class work held during the preceding year, it was decided that the designation of the special classes as "disciplinary" and

"backward," and that the grading of the pupils in terms of the eight elementary grades, is not satisfactory.

Classification.

In order that the special classes be designated by terms descriptive of the aim of the work, rather than in terms of the characteristics of the children themselves, the following classification has been adopted:

Orthogenic (right mental development) classes (heretofore known as "Disciplinary" or "Backward"). For pupils who can not proceed with the school work at normal pace, or for whom special adaptations of the curriculum must be made.

Orthopedic (right physical development) classes. For crippled children whose physical disability makes special provision for them necessary or desirable.

Open-window classes (formerly designated as "Anemic" or "Fresh air"). For pupils whose physical condition is such as to require special attention and treatment.

Open-air classes (heretofore designated "Tubercular"). For children who are excluded from attendance in regular schools under section 3 of Rule IV of the board of public education.

Grading.

It has been further recommended that all children in special classes be graded as follows:

Grade A will consist of pupils of low mentality who are held in school pending appropriate institutional provision.

Grade B will contain pupils of a higher mental grade than Grade A, but who probably could not, with profit to themselves, be returned to the regular grades. The interests of these pupils will be best served by endeavoring to fit them, through manual training, for industrial life.

Grade C will contain—(*a*) Retarded pupils who are to be restored, if possible, to the regular grades.

(*b*) Those who are able to do the work of the regular grades, but who, by reason of moral delinquency, should not be permitted to return to them. They should remain here until better provision can be made for them.

It must be evident that the proper classification of exceptional children requires professional skill of a high order. The very terms used in Philadelphia to describe the aim of the work suggest the services of a trained psychologist working in cooperation with the school physician and the nurse.

A sample report from the Springfield, Mass., psychological laboratory follows:

PSYCHOLOGICAL LABORATORY, SPRINGFIELD, MASS.,
Date, January 16, 1913.

Data for identification: Name, Albert Riendeau. Age, 13. School, East Union Street. Grade, IV (A). Address, ———, Quincy Street. Nationality, French. Father's name, Felix. Occupation, carpenter.

Vitality: Somewhat below the average in lung capacity, strength, and resistance to fatigue.

Organic defects: Right tonsil slightly enlarged. Antero-posterior curvature of spine.

Nervous defects: Higher nervous centers overactive; lower nervous centers underactive. Irregular discharge of energy.

Motor control: For finer movements, exact and fairly rapid; for coarser movements, inexact and irregular.

Special senses: Left eye weak in muscle control. Acuity of vision in left eye, one-third; right eye, normal. Touch and muscle sense normal and acute.

Emotional constitution: Sensitive; irritable; proud; easily discouraged, but persistent in efforts.

Intellectual constitution: Mental age about 11 years. Visual imagery for words, poor. Perceptions of space and form, good. An object-minded boy.

Conclusions: This boy should have as much objective work as possible. The practical arts class would suit him. Miss Studley[1] should look up his home life, his diet, sleep, and play. He lacks in large, free motor control, and I suspect that he doesn't play enough. He should have the attention of an oculist.

VII. THE VISITING TEACHER.

Given the consulting psychologist with a laboratory properly equipped and a file of his records of cases, how shall his recommendations get carried out? There are at least three ways, and they may all be found in operation, singly or in combination; the written or printed communication is not very effective in getting things done in any home; the regular teacher has duties that preclude giving enough of her time in calls to get results; the visiting teacher is the one person who can fully meet the situation. In Rochester, N. Y., such a teacher is employed by the school board; and in Hartford, Conn., and Springfield, Mass., she works under the direction of the superintendent of schools; in Boston under the auspices of the Ellis Memorial Settlement. The public education association of New York quotes the city superintendent as saying in his last report that the board of education was so impressed with the work of the visiting teachers furnished by the association that it asked the board of estimate and apportionment to appropriate $25,000 to take over and extend the service. The appropriation was refused, but the work is continued. In Rochester the function of the visiting teacher is thus defined:

The appointment of a visiting teacher is an attempt on the part of the school to meet its responsibility for the whole welfare of the child. There are few of the children in our schools who are suffering through the willful neglect and abuse of parents. Whatever suffering comes for which the home is responsible, comes largely through ignorance or necessity. It will be the function of the visiting teacher to enlighten and to aid in relieving. Her field will be restricted to the girls. Her aim will be to secure the maximum cooperation between the home and the school. Through such a teacher the school is by no means usurping, but it is rather stimulating and encouraging the home to meet to the limit of its power its full share of the responsibility for the welfare of the child.

[1] Miss Studley is the visiting teacher.

In New York the services of the visiting teacher are summarized thus:

The visiting teacher, carefully selected for her qualities of tact, judgment, and social training, stands at the teacher's right hand with the time and the equipment to work out adjustments between home and school. She completes the school staff and is an important factor in insuring to each little child in New York the full opportunities of education.

In Springfield the visiting teacher works in close cooperation with Dr. George E. Dawson, the director of the psychological laboratory. Thus far her work has been fourfold: The consideration of candidates for examination by Dr. Dawson; the following up of such candidates after examination according to recommendations made; the study of cases not properly needing Dr. Dawson's examination, yet in which the child is a problem that belongs neither to the attendance officer nor the school nurse; and the preparation of a system of record keeping. Notification of cases needing the attention of the visiting teacher is made by means of this blank:

To the Visiting Teacher:

Please call at room ....., School ....., to see Miss .... about ..... Residence of pupil, ... St.

These notices to be sent to the principal's office. The history of each case is recorded on the following form:

NAME OF CHILD..... Date opened..... Case No.....
DATE AND PLACE OF BIRTH..... Date closed.....
PERSON IN PARENTAL RELATION:
Name..... Address.....
CASE REPORTED BY.....
REASON FOR INVESTIGATION: (a) Scholarship. (b) Conduct. (c) Attendance. (d) Lateness. (e) Advice or information. (f) .....

CHILD.

MENTAL CONDITION.	DATE.	SOURCE OF INFORMATION.	PHYSICAL CONDITION.	DATE.	SOURCE OF INFORMATION.	GENERAL CHARACTERISTICS.
Bright			Previous diseases			(Habits, associations, occupations, amusements, etc.)
Average						
Slow			Normal			
Dull			Defective as follows:			
Defective			Vision			
			Hearing			
			Teeth			
			Tonsils			
			Adenoids			
Emotional constitution			Palate			
			Orthopedic			
			Pulmonary disease			
			Cardiac disease			
			Chorea			
			Malnutrition			

SCHOOL.

HISTORY.....

CONTEMPORARY SCHOOL RECORD.

School.	Date.	Grade.	Absent.	Late.	Conduct.	Work.	Esp. efficiency.	Esp. deficiency.	School.	Date.	Grade.	Absent.	Late.	Conduct.	Work.	Esp. efficiency.	Esp. deficiency.

RECORD SUBSEQUENT TO ACTION.

School.	Date.	Grade.	Absent.	Late.	Conduct.	Work.	Esp. efficiency.	Esp. deficiency.	School.	Date.	Grade.	Absent.	Late.	Conduct.	Work.	Esp. efficiency.	Esp. deficiency.

HOME AND NEIGHBORHOOD.

PARENTS: (a) Nationality—F. M. (b) Years in U. S. A.—F. M. (c) Speaks English—F. M. (d) Religion—F. M.
Attitude of parents toward child:
Attitude of parents toward school:
Condition of home:
Occupation of father: Mother:
Children: No. In school: Working:
Home influences: (Adverse or favorable)
Neighborhood influences: (Adverse)
Social agencies: (Already connected with case)

AT TIME OF REFERENCE.	SUBSEQUENT TO ACTION.
CAUSES FOR REFERENCE OF.....	ESTIMATE OF.....
OBSERVATION OF VISITING TEACHER.....	ESTIMATE OF.....
SUGGESTIONS OF PSYCHOLOGIST.....	

HISTORY OF CASE.

Signed:.....
Visiting Teacher.

VIII. THE HEALTH OF SCHOOL CHILDREN.

Late reports indicate the almost universal existence of health supervision in the school systems of the country. Mere inspection to guard against the spread of communicable disease, while regarded as highly important, is no longer the sole aim of the school physician.

The school nurse is not everywhere employed, but the school systems in which both physician and nurse are found are too numerous to be listed in a report of this kind. Many cities provide a dental clinic; some on the basis of volunteer services of dentists, and others on a more certain and permanent basis. Sacramento, Cal., is the only city heard from in which the employment of the school dentist preceded that of the school physician and the school nurse. The employment of dental nurses is now advocated in connection with the clinic as a less expensive scheme for a city and more effective than the clinic alone, because more children can be reached, and if children's teeth are always kept clean, decay does not set in. The board of education of Bridgeport, Conn., has made provision for an experimental dental clinic on advanced preventive and educational lines. The plan involves actual surface treatment of children's teeth once a month by a dental nurse. An appropriation of $5,000 has been made, by means of which the plan is to be tried in one school. In this one school the teeth of those children in the first five grades whose parents are too poor to pay for dental service will be filled by the graduate dentist in charge. No doubt bad health, due in part to bad teeth, is responsible to a large extent for the slow progress of many children in their studies. The human mechanism can not reach its full efficiency unless all of the parts are in good working order, and more and more are school boards planning to give the child's body the first consideration instead of the last. This is seen also in the wide vogue of the open-air school for children of low vitality, and the partially heated open-window room for the less pronounced cases as well as for children in a normal state of health. As generally managed, the only difference between the ordinary classroom and the open-window room is that in the latter the windows are kept open in all weathers. There is no modification of the school program in the case of the open-window room; it is merely a successful attempt to improve school conditions for the normal child.

The open-air school, on the other hand, is practically the same everywhere. It is designed for children handicapped by physical weakness, children whose needs are greater than those of normal children. The successful treatment of the anemic child, predisposed to tuberculosis, depends on more than fresh air, though that is a vital factor. He must have during the school day plenty of nourishing food, a period of absolute relaxation, and a freedom from restraint that is incompatible with large classes in indoor schoolrooms. In the open-air schools, therefore, each teacher has charge of about half as many children as are assigned to the ordinary schoolroom, and three meals are served to the pupils daily between the hours of 8:45 a. m. and 4 p. m. Each child is supplied with a cot,

upon which he takes his noonday rest, two army blankets, and felt boots for use in very cold weather. Shower baths are administered under the direction of the visiting physician. The program makes liberal provision for physical exercise and free play, and in general the children enjoy a greater degree of freedom than is possible under the ordinary school conditions.

The objection is offered that feeding school children is not a legitimate tax upon the State. In Massachusetts, public sentiment is so far in favor of the movement for open-air schools that a referendum was provided for by legislative enactment last winter by which any community may decide to furnish food to children at public expense. This sort of school is expensive, but not many open-air schools are needed in any city. A city of 100,000 inhabitants might to advantage maintain two or possibly three. The open-window school, on the other hand, may be multiplied indefinitely without added expense, for it is a neighborhood school. The children are within walking distance of it, and they go home to their meals. Usually some heat is supplied in the coldest weather, enough to maintain a temperature of 50° or 60°. Rain or snow may be kept out by means of cheesecloth tacked over the open upper half of the window frame. The chief obstacle to the wider use of the open-window plan seems to be the objection of the few. It is not a question that can be decided by majorities. If 39 parents approve and one objects, the windows must remain closed unless the child of the objector can be transferred without loss of grade, an adjustment not always easy to make. The utility of our expensive heating systems, with their elaborate provision for forced ventilation, is being seriously questioned in these days by not a few architects and engineers of repute, yet the average parent hesitates to give his assent when the teacher proposes to throw open the windows and let the air in.

HOME STUDY.

It is reported that Boston has lengthened the school day for the grades below the high school one-half hour, this extra period to be devoted to the preparation of lessons for the next day, the purpose being to reduce home study to a minimum. In Newark, N. J., all required study is done at school. In the schools of Bridgeport, Conn., there is no required home study. The period devoted to a given study is systematically divided between preparation and recitation. During the first half of the period the children study the lesson for the following day, and during the second half of the period they recite the lesson learned the day before.

Many of the reports which have been received speak of the emphasis now placed on teaching children to study and the growing tendency

to have more work done by the children within school hours. It is pointed out that the requirement of school study at home has highly magnified the difference in home conditions of young people. Students from cultured homes, supplied with books of reference and with opportunity to be alone during the home-study period, have a great advantage over young people from homes in which there are no such aids. In study periods at school, all students are on an equal footing as to conditions for work. Of course no one forbids home study. The extent of the movement in question seems to be to teach how to study, to encourage the preparation of all lessons in school time, and not to make home study a requirement. The general reduction in the number of pupils assigned to a single teacher favors the elimination of home study or at least a reduction in the amount required.

The school board of Boston has fixed the appointment of teachers on the basis of one teacher for every 42 pupils in the first grade and 44 in other grades. A few years ago the usual number of children assigned to a single room in that city was 56. The reduction of the size of classes in elementary schools elsewhere has exceeded that in Boston. Out of 182 cities reporting, 35 have made a reduction in the size of classes within the year.

There is no marked tendency toward lengthening the school year. Kankakee reports an increase from 38 weeks to 40 weeks, while Richmond, Ind., reports a reduction from 38 weeks to 36. Other cities of the 182 reporting say "no change." The all-year school is advocated in educational meetings and may become a regular feature, but at present Newark, N. J., appears to furnish the only example. Newark's favorable experience with the all-year school was a feature of the commissioner's report for the year 1912. In these days when the wider use of school buildings is being advocated, it would not seem too great an innovation to provide regular schooling for those who want it during the summer months. In Massachusetts and some other States the labor laws enforce idleness in July and August, when in the opinion of many thoughtful people either remunerative employment or school attendance would improve both health and habits.

Supt. Poland writes:

> I am still of the opinion that our school year is altogether too short for a large number of children, who are better off in school than on the streets of a crowded city with no other employment than the street affords. The school year of 40 weeks is long enough, perhaps, for the majority of boys and girls who do not need to make haste to get into harness, but for others who should begin the work of bread winning as early as their strength and health will permit, the all-year school is a Godsend.
>
> The two all-year schools which were established in the Seventh Avenue and Belmont Avenue school buildings in 1912 have been successfully maintained during the past year. Started as an experiment, almost if not the first of the kind in the

country, their success was watched with considerable interest by educators elsewhere as well as at home.

The difficulties encountered, so far, in adjusting the all-year plan to schools of the usual type have not been found to be insuperable. On the contrary, it is quite plain that the administration of both types of school, the old and the new, in the same building, by the same teachers, can be readily accomplished.

In general, the second year's experience in the organization and operation of these schools has been highly satisfactory and warrants their increase in number as soon as possible, especially in the congested districts of the city, where there is a large foreign population. The additional two months of schooling made possible in the all-year school appeal strongly to these people who are unable to keep their children in school for many years.

IX. INSTRUCTION IN HYGIENE.

The Fourth International Congress on School Hygiene, held in Buffalo in August, revealed the fact that we are only at the beginning of the movement for safeguarding the health of school children.

The program of the congress divided itself up into six general sections, each of which held from two to five sessions. Roughly these were: (1) School buildings and their sanitation, including design and equipment, ventilation, heating and cleaning, and open-air schools; (2) The status and methods of instruction in hygiene; (3) The hygiene of instruction, including mental hygiene and the treatment of mentally abnormal children; (4) Medical, hygienic, and sanitary supervision in schools, including medical inspection, school nurses and clinics, causes and handling of physical defects and disease, conservation of vision, oral hygiene, school feeding, tuberculosis; (5) Physical education; and (6) Special aspects of school hygiene, especially relations to home and community, school lunches, child labor, club women's cooperation, etc.

In view of the movement toward the teaching of sex hygiene in the schools, the discussion of this subject was of more than ordinary interest, but no solution of the problem proposed at the congress met with general approval. Opinion was sharply divided. Prof. Tierney argued that the details of sex instruction should be eliminated from school instruction, and that the entire emphasis be placed on purity by definite character training. "The appeal is to the wrong faculty, the emphasis in the wrong place." "Sex instruction is apt to put forward by some years the time of suggestion and temptation. Safety lies in diverting the attention from sex details." His conclusions were that the home is the proper place for sex instruction. It is along this line that several cities have moved. The Cleveland plan is simple and workable, but it does not reach all homes. In the evening, at certain public-school buildings, a woman physician, tactful and well qualified, presents the subject to such mothers as are interested; and at the same buildings at other evenings, a male physician speaks to the fathers. These meetings have been largely

attended. They constitute a part of the public lecture system. The same plan is in operation in New Orleans and Chicago. In addition to providing lectures on sex hygiene for adults, the board of education of Chicago now provides instruction on this subject for boys and girls in the high schools. On July 9, 1913, the board appropriated $10,000 to be used in payment for a course of three lectures on "personal purity," to be delivered to boys and girls in the high schools of Chicago. These lectures were begun on October 27 and will be completed in all of the high schools by November 26. Men physicians are delivering the lectures to the boys, women physicians to the girls. These physicians were selected by the superintendent of schools, and their names are submitted to the board of education for approval. The possibility of introducing the work in the upper grammar grades is under consideration.

X. THE COURSE OF STUDY.

According to reports at hand, courses of study are this year receiving more than usual attention. Some revision seems to be in progress everywhere. After the perusal of the paragraphs referring to revision, either made or contemplated, certain impressions stand out prominently: First, the teaching force is contributing toward the working out of the course of study; second, the revision in the elementary field, now often limited to six grades, involves much elimination of nonessential material; and third, the additions to the course appear chiefly in the upper grades and are more largely vocational than cultural.

Several reports speak of the help rendered by committees of teachers in revising the course of study. The foreword of the Minneapolis course, issued in 1913, may serve as a type:

> In the spring of 1911, a committee of 20 principals was appointed by the superintendents to make suggestions as to a new course of study and the organization and administration of the city schools. After a year's work, courses in the various subjects were agreed upon and recommended to the superintendent with suggested changes in textbooks. These courses were referred by the superintendent to his assistant and the supervisor of primary work for editing. With such correlation as the courses permitted and such modifications as were necessary and desirable and agreed to by the subcommittees of the committee of 20, this course of study was reported by the superintendent to the board and adopted June 11, 1912.
>
> The aim constantly in mind in the preparation of this course has been to recognize the new social values of the subject matter and the psychological development of the child.
>
> In June, 1913, teachers and principals were asked to make written comments based upon the year's trial of the course. These criticisms and suggestions were discussed at conferences with various groups of teachers. As a result such substitutions, eliminations, and rearrangements were made as to adapt better the course to the needs of the pupils.

Other typical statements are:

Grand Rapids, Mich.: A new course of study has been prepared through the cooperation of the principals and teachers of the school system. The elaboration of the course of study was intrusted to five committees. These reports will be printed as reports of the committees on the several subjects. These reports are not yet printed, but will be ready for distribution within a few months.

Jackson, Mich.: A general revision of the course of study has been begun. Supervisors and teachers are called upon by the superintendent for assistance.

Canton, Ill.: Course of study now being revised by committees of teachers working with superintendent.

Paterson, N. J.: The course of study in history was revised by a committee of principals following the plan laid down by the committee of eight.

VOCATIONAL STUDIES.

The strongest tendency in education to-day is that toward vocational training. This has been pushed by all classes, especially by business men and social workers outside the schools, and many within the schools, to meet two urgent needs—the demand for more skilled workers and to save the human waste in the industrial world. That which was supported by private charity, by private philanthropy, by some business houses and manufacturing concerns, and by some public-school systems has begun to receive the support of many of the States. As a result, vocational schools, part-time arrangements with local industries, and industrial departments in the regular schools have been established. New Orleans has just opened a trade school for girls and Saginaw one for both sexes. The following notes on the Saginaw school are taken from the minutes of the May meeting of the Saginaw school board:

In order to be of the greatest service to this community there will be:

(1) A day school—To prepare youth of both sexes for efficient industrial citizenship through the teaching of a definite trade.

(2) A continuation school—To give boys and girls between 14 and 18 years of age, who are already engaged in a trade, an opportunity to complete their general school education and also to improve their theoretical and practical knowledge of their trade.

(3) A night school—To help men and women engaged in a vocation to better their conditions by increasing their knowledge and skill.

In order to meet these conditions the school will be open all the year round and every day from 8 to 11.30 a. m., from 1 to 3.30, from 4 to 6, and from 7 to 9 p. m.; holidays will be observed according to law, and Saturdays the school will close at 12 m.

Sixteen communities in Massachusetts are now maintaining day industrial or vocational schools under the supervision of the State board of education. They are Beverly, Boston, Hadley, Harwich, Lawrence, Lowell, New Bedford, Newton, Northampton, Northboro, Petersham, Quincy, Somerville, Springfield, Westfield, and Worcester. The State pays one-half the running expenses of these schools.

In Holyoke an all-day industrial school was begun September 2, 1913, and a cooperative industrial course (Fitchburg plan) added in the high school.

Among the States giving aid to vocational schools New York is prominent. Under the new law signed by the governor May 26, 1913, public vocational schools are under the management and control of the local school authorities. However, since the State contributes very liberally to the support of such schools (paying two-thirds of the salary of the first teacher and one-third of the salary of every additional teacher in each school for day, evening, and part-time classes), it reserves large authority for itself in certification of teachers, specification and approval of accommodations, equipment, courses of study, and size of classes.

Under the provisions of this law Buffalo is operating a large number of vocational and prevocational schools for boys and girls in preparation for the great variety of occupations open to them in that city. What is true of Buffalo is true in a measure of all large industrial cities throughout the country, though not all have State cooperation as in Massachusetts and New York.

It would be highly interesting to compare the Wisconsin scheme of vocational education under the plan of separate administrative control with the State cooperation plan of New York and Massachusetts, but it is yet too early to make the comparison.

DIFFERENTIATION OF COURSES.

The movement toward differentiation of courses at the close of the sixth grade has been greatly accelerated by the general interest in industrial education. Reports indicate that the number of cities in which the elementary course, alike for all, ends with the sixth grade is increasing rapidly year by year. This is a return to the older ideas in effect as far back as 1860. In that year in an address to the teachers and citizens of New Haven, Conn., as superintendent of schools, Dr. Daniel C. Gilman refers to the period of elementary education as covering about six years. He speaks of it as a fact that no one questions that the child will pursue elementary studies from the age of 6 or 7 to the age of 12 and 13, and that he will then either begin his preparation to enter upon a trade or will take up secondary school studies at this point.

In the years intervening since 1860, the elementary curriculum has been greatly extended, two years' work having been added. We are now cutting through the grades at the place of differentiation established over 50 years ago, and from the sixth grade on are offering three lines of work—the old-line academic, the commercial, and industrial. In these days children are not wanted in the trades till they are 16 years of age; hence we establish prevocational and

vocational schools in which boys and girls who must early become wage earners may learn the elements of occupations and trades while continuing their academic education. Such schools also serve as agencies for vocational guidance. In the prevocational school the boy gains experience in the use of a variety of tools which he uses in manipulating material of various sorts. Thus he gains an industrial experience that helps him to find out for what line of work he has the greatest aptitude. The vocational school will give him further training in his chosen occupation and enable him to enter upon the trade of his choice with the best possible prospect of advancement.

The Tacoma plan of preparing children of elementary school age for industrial efficiency is applicable to—

Those pupils who are likely to be compelled to earn their own way as soon as they become 15 years of age.

Those who are mechanically inclined; that is, those who are planning to follow a trade.

Those whose needs seem not to have been met by the grade work and who desire a course of study which will give them more manual training or home economics.

These courses are open to any boy or girl who has completed successfully the work of the sixth A class and whose parent or guardian makes a written request that the pupil be permitted to take the prevocational courses, provided that the principal of the school last attended recommends the pupil for this work.

Membership in these courses is limited to 50 pupils in each center, 25 boys and 25 girls. Pupils will be admitted in the order in which their applications are received. If more than 50 applicants are received for work in either center, they will be placed on file, and pupils will be admitted in the order of their applications.

These courses provide separate classes for boys and girls. The school day begins at 9 and closes at 11.45 for the morning session, and begins at 1 and closes at 3.25 for the afternoon session. One-half of each day will be devoted to manual training or home economics. The other half of the day will be devoted to the following common branches: Arithmetic, language, penmanship, spelling, hygiene, history, or geography.

The work covered in the common branches will correspond somewhat to the seventh and eighth grades of the regular grammar-school course and will require two years for its completing. Pupils who wish to continue their school work may enter the Tacoma high schools upon an equal footing with pupils entering from the regular school course.

The type of vocational school maintained in Massachusetts may be understood by reference to the following description of the Springfield Vocational School. However, not all the vocational schools in Massachusetts are alike, as much latitude is left to the local authorities in fashioning the school curriculum; and while the State agents have definite recommendations to give, if the school as established meets their approval it will receive State aid.

The Springfield Vocational School is designed for boys over 14 years of age enrolled in the upper grammar grades. The local school board is the administrative head of the school, but in addition it is required by the State that an advisory board, composed of men engaged in the industries that are represented in the school, be ap-

pointed to confer and advise with the school board, the principal, and teachers of the school.

Instead of giving each boy a half day of shopwork and a half day of class work in succession, the work is carried on in what is called the "job" or "project" plan. The boys of each group are given one day a week of special classroom work that is related to the shopwork. For the remainder of the week their work is confined entirely to the "job." Each job requires an assigned amount of estimating, drawing, writing of specifications, shop notes, and cost records, as well as shopwork. Each step is taken up in order and is carried through until it is finished. Instead of dividing the day up into periods for each type of work, as is true in the other schools, the boy continues at each required step until it is finished. This is typical of the conditions the boys will meet in the industries, where they must continue all day without a very great change in the type of activity. Before a boy can go to the shop to execute the job, he must complete all written work, drawing, and estimating. This requirement is an incentive for serious application, and gives conditions so real that this part of the school work has shown very great improvement over results under the former half-day plan.

All of the shopwork is of the industrial type. No exercises have been used. The work has consisted of orders for the shop equipment or for other school departments. Now the school is allowed to take orders for standard articles, charging market rates for the product, and sharing the proceeds with the boys on an equitable basis. The aim has been to give present-day industrial practice.

The boys get their instruction in formal work from a man who is experienced as a class teacher; their work in specifications, drawing, and estimating, from men who in training are midway between the shop man and the class teacher; their shop instruction from a thoroughly practical mechanic.

THE TEACHING OF THRIFT.

The collecting and accounting of the penny savings of school children has come to be an important feature in many schools. As conducted in some school systems, however, it requires an expenditure of time on the part of the teacher out of proportion to the good results achieved; and the principal's part in the work often requires time that can ill be spared from supervision. Three plans have been received that have much to commend them on the score of simplicity and pupil responsibility. They have elements of decided educational value.

In the high school of Hutchinson, Kans., a "Student Activity Bank" has been organized.

Two principal purposes were in view in the establishment of this bank. One was to have a convenient and satisfactory method of handling the funds of the various student organizations, and the other was to make the work of the department conform as nearly as possible to actual business conditions and problems as the students will meet them when out of school. A voucher system was devised and put into use the requirements of which provide that all purchases made for any student organization using this bank must be approved by the student manager of the organization and also by the faculty adviser or manager of that organization, the check for the payment of the purchases being kept by the bank, and the bank also keeping a careful account of the funds of the organization. By resolution of the board of education the funds

of all high-school student activities are in the future to be handled through this bank by the voucher system. It is believed that this will result in a more satisfactory accounting of the funds of the various organizations. As students in the department do the most of the actual work of keeping the books and accounts, but under the supervision of the head of the department, the students are given training in actual business transactions involving the handling of cash and various business papers. Thus actual experience of the most practical kind possible is given the students as a part of their regular school work, an experience and training in exactly the kind of work these people expect to do after finishing their high-school course.

In 1912, by recommendation of the superintendent, the board of education in Leavenworth, Kans., made bank savings a part of the course of study. The recommendation made by the superintendent to the board, and adopted by it, was:

(1) That a banking transaction must take place between the bank and the child, if the greatest good was to be obtained from the endeavor.

(2) The teacher should *not* enter into the transaction.

(3) An organized effort made by principals and teachers in teaching savings. Outlined matter sent out by superintendent. Taught in regular class work.

(4) Bank opened in each building in the hall or in the principal's office. Hour, 8.30 a. m. Bank clerk present with deposit slips, etc.

(5) A regular schedule for each bank. No advertising.

The Ann Arbor, Mich., public schools have two unique features in connection with their school savings system. The stamp plan, with folders, is in use. The students in the commercial department of the high school act as messengers for collection of savings in the various schools. They are assigned to duty for specified periods by the head of the commercial department and are required to count and record the savings of the schools to which they are sent and to bring them to the high school.

When the system was established, the board of education could not agree on a bank that would have control of all the deposits and an arrangement was agreed upon so that a folder filled with stamps (50 one-cent stamps) might be deposited in any local savings bank and accepted in the local clearing house as a check on the savings deposits which were in a separate account in the bank that held other school moneys. In this way pupils may open a savings account in the bank of their choice, and the banks find it wise to be agreeable to their young patrons who are to be the business men and women of the community in a few years.

XI. VOCATIONAL GUIDANCE.

As yet the prevocational school and the vocational school, as agencies for vocational guidance, reach only the few. Various plans for reaching all who need guidance have been proposed, but the work is new and large results can not be claimed with assurance.

What is done in various places may seem crude and awkward, but the movement has great possibilities and already it has done the important thing of drawing some attention from the subjects of the curriculum to direct attention toward the boy and girl, with the excellent result that the need of considering their individualities is felt.

The Middletown (Conn.) high school endeavors to aid its students in finding suitable employment. The card to be filled by the pupil applying for work is here reproduced:

MIDDLETOWN HIGH-SCHOOL EMPLOYMENT FORM.

Name.....Date.....
Parent.....Age.....
Full address.....Class of 19—.
.....Nearest telephone.....
Name and address of former employer, if any.....
.....
Name and address of two references.....
What kinds of work have you done?.....
What kinds of work can you do?.....
What kind of work do you prefer?.....
Do you wish employment afternoons, Saturdays, or both?.....
How much time daily or weekly can you devote to this work?.....
.....

Grand Rapids is the only city known to the writer in which a systematized scheme of vocational guidance is worked out under the control of the board of education. This guidance is given, beginning with the seventh grade and extending through the high school, and is developed in connection with the work in English:

GRAND RAPIDS.

A brief statement of the aim of the work in each grade is given, beginning with the seventh and extending through the twelfth.

Seventh grade:

Theme: Vocational Ambition.

Purpose: To arouse within the pupil a desire to be somebody and something worth while in the world.

Eighth grade:

Theme: The Value of an Education.

Purpose: To impress upon the pupil the need and means of obtaining some further preparations for life than that of the grammar grades of the public schools.

Ninth grade:
First semester—
Theme: The Elements of Character That Make for Success in Life.
Purpose: To draw out an understanding of real success in life and how it is obtained, and to apply the fundamental lessons of character building to the needs of each pupil.
Second semester—
Theme: Vocational Biography.
Purpose: To continue the same lessons from the lives of successful men and women in varied fields of endeavor.

Tenth grade:
First semester—
Theme: The World's Work.
Purpose: To study vocation in general in order that the pupil's vision of the call to service may be as broad as possible.
Second semester—
Theme: Choosing a Vocation.
Purpose: To attempt to select that vocation or general field of occupation for which the pupil by self-analysis seems best fitted.

Eleventh grade:
First semester—
Theme: Preparation for Life's Work.
Purpose: To plan out a definite course of study and conduct to meet the special requirements of the profession, business, or industry chosen.
Second semester—
Theme: Vocational Ethics.
Purpose: To study the moral problems peculiar to the chosen business, profession, or occupation.

Twelfth grade:
First semester—
Theme: Social Ethics.
Purpose: To study the relation of the individual in his future vocation to society.
Second semester—
Theme: Civic Ethics.
Purpose: To study the relation of the individual in his future vocation to the State.

The movement for vocational guidance has attained such proportions that the propaganda has its own organization known as the Vocational Guidance Association. This association met with the National Society for the Promotion of Industrial Education at Grand Rapids, October 19 to 25, 1913. The object of the association according to its constitution is:

To promote intercourse between those who are interested in vocational guidance; to give a stronger and more general impulse and more systematic direction to the study and practice of vocational guidance; to establish a center or centers for the distribution of information concerning the study and practice of vocational guidance and to cooperate with the public schools and other agencies in the furtherance of these objects.

CREDIT FOR HOME WORK.

School men have for several years bemoaned the fact that modern city conditions make it impossible for boys and girls to receive that practical preparation for life which the country home of to-day and the urban home of 30 years ago afforded. The city boy, they say, has no opportunity for doing "chores," which are so effective in giving him an insight into everyday duties and which are so fruitful in developing his mental faculties and inculcating the spirit of work. The modern home has little wood to chop, water to carry, or repairs to make.

The advent of the department store, with its offerings of ready-made clothes, and of the bakery, with its ready-made rolls and bread, have taken from the modern city girl the opportunity of making garments, of baking, and of doing a thousand and one things about the home which the girl of a generation ago did so well to her own advantage in later life.

Efforts to correlate the work of the home with that of the school have heretofore, for the most part, been confined to the country schools. Now several cities have undertaken to give credit for home work. Among these cities are West Chester, Pa., Portland, Oreg., Leavenworth, Kans., and St. Cloud, Minn. The last three give credits in high school only.

In Oregon any high school in the State may allow a total of 10 per cent of credits for a university certificate of admission, on good life, good spirit, and good work at home. Supt. Alderman, of Portland, reports:

> We are giving credit in school for music work done outside of school, and are in some schools giving credit for any work done at home.

The blank form of report suggesting kinds of work follows:

[Obverse.]

HOME WORK RECORD OF

_____

.....

FOR WEEK ENDING....., 19..

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.	Total.
	Min.	Min.	Min.	Min.	Min.	Min.	Min.	
1. Work in garden								
2. Splitting kindlings								
3. Bringing in fuel								
4. Milking cow								
5. Care of horse								
6. Preparing meals								
7. Washing dishes								
8. Sweeping								
9. Dusting								
10. Bedroom work								
11. Washing								
12. Ironing								
13. Care of baby								
A. Bathing								
B. Brushing teeth								
C. Sleeping with open windows								
D. Going to bed before 9 o'clock								
E. Attending church or Sunday school								
Total								

I certify that the above is a correct record:

.....

Signature of Parent or Guardian.

[Reverse.]

RULES GOVERNING CREDIT FOR HOME WORK.

Every Friday afternoon a Home Work Record Slip will be given to each pupil. Beginning with Sunday, all time spent by the pupil in home work should be entered in the proper space.

Each Monday morning a slip filled during the previous week should be returned to the teacher. The slip must be signed by the parent or guardian as an assurance that a correct record has been kept.

Any work not listed but of value to the parents may be counted, and the nature of the work specified in the blank spaces.

At the close of the school month, when the report of school work is made out, in the column "Home Work," the pupil will be marked on the scale of 100 for actual work of not less than one-half hour each day, and in the column "Personal Care" on the scale of 100 for numbers A, B, C, and D, and for attendance at church or Sunday school.

In addition to credit on the report card, reward may be given at the option of the principal for a specified amount of time spent in useful work at home.

For purpose of reward credit of 5 minutes a day will be allowed for each operation listed as A, B, C, and D, and 20 minutes for attendance at church or Sunday school.

In Sioux City the credits are limited to instrumental music; in Leavenworth one unit of credit is allowed in the high school for work done in any vocation, where the work has been checked up by heads of departments and found to be worthy of credit; in St. Cloud the credits gained by high-school students in outside work do not reduce the number of school credits required for graduation, but are extra credits or honors.

XII. CLASSIFICATION AND PROMOTION.

Not only are the vocational needs of individual children looked after as never before by the school management, but arrangements for the individual child's progress through the grades unhindered and unhurried by others are also a matter of study and experiment at the present time, notwithstanding the fact that for 20 years promotion of pupils has been a subject for discussion in every school system. In systems that have adopted the six-grade elementary plan, followed by differentiated courses in the seventh and eighth grades, either with or without the designation "junior high school," the proper classification of children can be more surely brought about, though from the standpoint of program making not more easily. One superintendent somewhat naively calls attention to the fact that since special classes and sections were formed in his schools, there are more questions coming up that he must decide. The old lock-step system caused little vexation of spirit in the superintendent; much in the children. In these days, happily, conditions are becoming reversed.

Promotion schemes come and go. The celebrated Cambridge double-track plan has been modified beyond recognition. The Pueblo plan emphasized the importance of the individual so effec-

tively that all school men took notice, but as an exclusive system it is no longer found in operation anywhere. The North Denver plan is said to have furnished the idea underlying the "group system" now used in some New York schools and elsewhere, but changed conditions have superseded all these plans as complete and independent schemes. They have made their contributions and now appear only as elements in other plans.

THE PHYSIOLOGICAL DEVELOPMENT BASIS OF CLASSIFICATION.

Dr. C. Ward Crampton, director of physical training in New York, is quoted as saying that children should be classified according to their physiological development, rather than according to their school age in years. From birth to maturity children develop at different rates, some outstripping others in the race, so that at the age of 14 about one-third are already men and women, one-third are in a transition period, and one-third are quite immature. The difference between the mature and immature of the same age is so marked that it is astonishing that the idea of separating them for educational purposes has not occurred to our school authorities. The mature group are 30 to 50 per cent stronger and 10 to 15 per cent taller than the immature group of the same age. The mental abilities show an even more striking difference. In short, of those who are from 12 to 15 years of age, some are young men and others are children, regardless of their ages in years or progress in school. The young men with their ripened potential abilities sit on the same benches, are taught the same lessons, and are subject to the same discipline as children, and the results are quite as poor as they would naturally be under these circumstances. The fundamental fact that the immature and mature are wholly different and should receive different educational and social treatment is disregarded. In the elementary school the mature do badly; in the high school, frankly fitted to their needs, they do 20 to 50 per cent better than the immature. While it is at this point that the educational system on the inflexible system of scholasticism and chronological age breaks down, it suffers also from a lack of rational classification wherever mature and immature children are brought together in the same classroom.

Several years ago Dr. Crampton worked out his plan of classifying pupils according to physiological development in one high school and two elementary schools. In the high school in which the plan was tried Dr. Crampton found that 35 per cent fewer pupils dropped out of eight sections than from four sections classified according to custom. In the two elementary schools this system was tried in the last three classes. Equally satisfactory results were reported. The plan will be extended throughout the Commercial High School and will include four more elementary schools.

THE NORTH ADAMS PLAN.

The course of study in the North Adams (Mass.) elementary schools makes no reference to years or grades, for the whole work is not divided into 9 parts, each part representing one year's work, but into 24 equal parts instead. This makes it possible to group the pupils according to ability, allowing each to go forward as fast as he can without "skipping." For instance, many pupils will find it easy to take three sections of work each year and thereby complete the course in eight years, as represented in diagram 1.

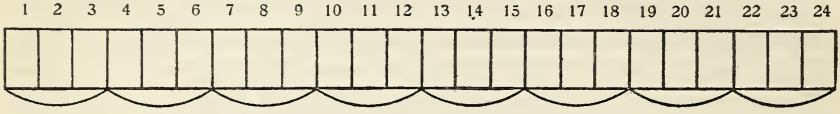


DIAGRAM 1.

Others, on account of ill health or for other good reasons, may not be able to cover three sections every year. For all such two sections taken occasionally will enable them to graduate in nine years, as shown in diagram 2.

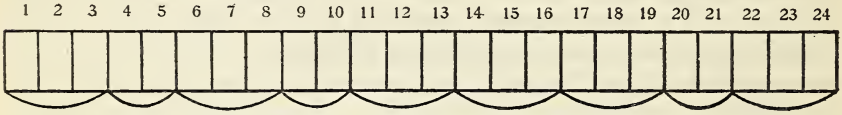


DIAGRAM 2.

If, on the other hand, certain pupils are able, without undue effort, to take four sections occasionally, they will be prepared to graduate from the grammar school at the end of seven years. See diagram 3.

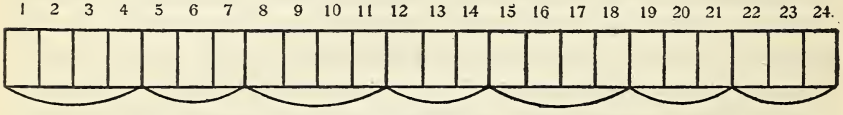


DIAGRAM 3.

The work in each school is so planned that in each room there are two or three groups of pupils instead of one class. Therefore, the number of the room never means grade or year.

If at any time it is necessary to know how far along in the course any boy or girl is, one simply asks, "What section of work is he doing?" For instance, if a boy is in section 12, he is half through the course; if in section 8, one-third through, and so on.

SPECIAL CLASSES.

Returns from 182 cities indicate that the special class for exceptional children of one or more types is a feature well-nigh universal. Special provisions for the feeble-minded and backward are still far

more common than special provision for the highly gifted, though two cities not previously credited with such classes now report them. These are Southbridge and Springfield, Mass. Southbridge reports a selected eighth-grade class, taking Latin and algebra. In Springfield, selected pupils in the last two elementary grades are offered a modern foreign language as an extra study with high-school credit and first-year high-school English. Subject promotion has been extended downward to include the last three grammar grades, making them practically, though not in name, the junior high school.

THE JUNIOR HIGH SCHOOL.

The junior high school consists usually of the last two grades of the elementary schools and the first high-school grade, with the teaching organized departmentally and with differentiated courses to meet the needs of pupils of different tastes, different aptitudes, and different life purposes. Of 182 cities reporting, 17 have either adopted the junior high-school plan or are preparing to do so. Doubtless some of these, if not all, should be classed as making provision for highly gifted children in their differentiated courses.

THE CITY COLLEGE.

The city college, or municipal university, organized to carry the pupils four years beyond the high school, exists at present only in Cincinnati, though Los Angeles is moving in this direction. Akron, Ohio, will soon take over Buchtel College and make it a part of the city school system. The State legislature, at its session of 1913, enacted a law permitting cities to take over universities, the same to become city universities, to be maintained under a board of trustees appointed by the mayor and approved by the city council. The same law also empowers the taxing body of the city to levy a tax, not to exceed 5 mills, for the support of the city university. The Akron city council recently passed an ordinance to assume control of Buchtel College. The college authorities were desirous of making the transfer. Just as soon as the tax can be levied, the college, with all its endowments, equipments, etc., will become a city university, under the control of the board of trustees to be appointed by the mayor.

XIII. DEPARTMENTAL TEACHING IN THE GRADES.

In order to secure definite information relating to departmental teaching in city schools, the United States Bureau of Education recently sent a questionnaire upon this subject to superintendents in cities of 5,000 population and over. Of 813 replies received, 461 report departmental teaching, some in all subjects and others in only a few. Not many have departmental teaching below the sixth grade and few favor it below the seventh, if there are eight grades in the

elementary school. It is usually stated that coordination is secured chiefly by frequent conferences of teachers, close supervision, and detailed courses of study. The following is a tabulation by States of replies to the principal questions:

States.	Departmental teaching?		Is the percentage of failures less?			Do a larger percentage enter high school?			Are pupils better able to do high-school work?		
	Yes.	No.	Yes.	No.	No data.	Yes.	No.	No data.	Yes.	No.	No data.
Total	461	352	240	78	143	250	61	150	302	34	125
Alabama	5	2	1	2	2	1	2	2	3	.....	2
Arizona	2	1	.....	.....	2	.....	.....	2	1	.....	1
Arkansas	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
California	17	6	10	2	5	9	2	6	11	2	4
Colorado	3	3	2	.....	1	2	.....	1	2	.....	1
Connecticut	16	9	8	.....	8	6	2	8	10	.....	6
Florida	1	3	1	.....	.....	1	.....	.....	1	.....	.....
Georgia	3	11	1	.....	2	1	.....	2	1	.....	2
Idaho	4	.....	4	.....	.....	4	.....	.....	4	.....	.....
Illinois	33	23	18	7	8	16	4	13	21	4	8
Indiana	35	3	23	7	5	28	4	3	29	2	4
Iowa	12	7	7	3	2	9	1	2	9	1	2
Kansas	11	4	6	1	4	7	1	3	6	1	4
Kentucky	5	10	4	.....	1	4	.....	1	4	.....	1
Louisiana	2	3	1	.....	1	1	.....	1	1	.....	1
Maine	2	11	1	.....	1	1	.....	1	1	.....	1
Maryland	1	2	1	.....	.....	1	.....	.....	1	.....	1
Massachusetts	28	43	8	6	14	6	5	17	9	4	15
Michigan	30	11	16	7	7	17	5	8	23	2	5
Minnesota	12	4	8	2	2	8	2	2	10	2	.....
Mississippi	1	2	1	.....	.....	1	.....	.....	1	.....	.....
Missouri	10	9	5	1	4	5	.....	5	7	.....	3
Montana	3	4	1	.....	2	1	.....	2	2	.....	1
Nebraska	6	2	5	.....	1	4	.....	2	5	.....	1
Nevada	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Hampshire	1	7	1	.....	.....	1	.....	.....	1	.....	.....
New Jersey	18	14	7	2	9	9	2	7	11	.....	7
New York	42	15	22	4	16	23	5	14	25	3	14
North Carolina	6	3	3	1	2	3	1	2	4	.....	2
North Dakota	2	2	2	.....	.....	2	.....	.....	2	.....	.....
Ohio	23	33	9	6	8	12	5	6	12	4	7
Oklahoma	7	2	4	1	2	4	1	2	5	.....	2
Oregon	1	2	.....	1	.....	.....	1	.....	.....	1	.....
Pennsylvania	49	49	22	9	18	25	8	16	30	4	15
Rhode Island	3	7	1	1	1	1	1	1	1	1	1
South Carolina	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Dakota	5	1	2	2	1	3	.....	2	3	1	1
Tennessee	3	3	.....	1	2	.....	.....	3	1	.....	2
Texas	18	5	11	4	3	9	4	5	15	.....	3
Utah	4	.....	4	.....	.....	4	.....	.....	4	.....	.....
Vermont	4	3	1	1	2	2	.....	2	3	.....	1
Virginia	7	5	4	2	1	5	1	1	6	.....	1
Washington	9	2	6	2	1	5	2	2	6	1	2
West Virginia	4	3	4	.....	.....	4	.....	.....	4	.....	.....
Wisconsin	10	12	3	3	4	3	2	5	6	1	3
Wyoming	3	.....	2	.....	1	2	.....	1	1	.....	2

The following are typical of the views expressed by those who have experimented with departmental teaching in the grades:

1. Succeeds with the strong and industrious pupils and fails with the weak and lazy.

2. Tends to develop independence and self-reliance.

3. Danger of teachers making their subjects of more importance than their pupils.

4. Have had departmental teaching since 1896–97 and have found that it is more economical; that it requires pupils to be independent of the teacher; that they are better able to express their ideas, and that promotion can be made by subject.

5. English should be distributed among the different teachers so that it may be coordinated with other subjects.

6. Better teaching and discipline; more interest; less loss between grades.

7. Satisfactory on the whole, but open to faults, such as overtaxing the child.

8. Efficiency of pupils higher; discipline suffers.

9. Makes the break between the grades and high school less sudden.

10. All right if child does not meet too many teachers.

11. Very superior; teachers more interested; pupils develop broader ideas.

12. Excellent if teaching force is prepared and in favor of the plan.

13. If there is a poor teacher in the departmental corps, pupils do not have her all the time.

14. Will abandon the plan, as we secure better results with one teacher to a grade; discipline easier, and teachers prefer old method of having a room of their own.

15. Gave the plan a fair trial, but it proved an absolute failure; perhaps the novelty of the plan caused some to think it a good scheme.

16. Difficult to coordinate the work properly; moral hold of teacher not so strong; supervision by principal more difficult.

17. Will abolish or greatly modify it this year; pupils are not taught individually.

18. Do not care for it; would rather have one-teacher plan in first-year high school than extend departmental system to the grades.

XIV. CONDITIONS AFFECTING THE WORK OF TEACHERS.

SALARIES.

Of 182 cities reporting, 83, or 45 per cent, have increased the salaries of teachers, and 45, or 25 per cent, the salary of the superintendent. The Report of the Commissioner of Education for 1912 made an equally good showing for this item. Many of the reports at hand refer to an increased maximum or a special maximum salary attainable for teachers of superior merit, the question of merit being determined by ratings made by supervisory officers. Professional progressiveness, evidenced by certificates for summer school work, university courses, or other means of professional improvement sought by the teacher, is a large factor in the merit system report. The extension of agencies for increasing the efficiency and widening the outlook of teachers already in service by utilizing these agencies in connection with salary schedules is a striking feature of present-day tendencies. Not many years ago the few cities in which discrimination was practiced on any other basis than previous preparation and length of service were pioneers, and they experienced all of the difficulties inherent in pioneering. They are now members of a large and growing company. A few typical statements from reports may be quoted:

Phoenix, Ariz.—Teachers promoted solely on merit shown in schoolroom; attendance at summer school, and professional reading.

Sacramento, Cal.—A new salary schedule was adopted. A provision which was formerly permissive has been made mandatory; it gives special increments of salary to teachers with a rating of good or higher who take advanced professional courses of study. We give any teacher a year's leave of absence, without forfeiture of salary

except the pay of a beginning teacher, for study, for educational travel, or for the benefit of her health.

Trinidad, Colo.—Superintendent conducts classes, credit for which is given at the State university and State teachers' college; 42 teachers out of 67 took the work.

Stamford, Conn.—Extension courses have been arranged with Teachers' College, Columbia University, which will meet the educational requirements of the new regulations.

Athens, Ga.—Reading course which teachers are required to take.

Decatur, Ill.—Salary graded according to quality of service and extent of preparation.

Streator, Ill.—Continued service and promotion in salary will depend upon the strength, spirit, and growth shown by the teacher in all her school experiences. To this end the board reserves the right to make as a condition of any or all contracts the attendance upon an approved summer school or the following of a prescribed course of study or reading at home, as the board may elect.

East Chicago, Ind.—New rule for salary increase according to credits for private or university work approved or outlined by superintendent. Original preparation, personality, and quality of teaching form basis.

Evansville, Ind.—Salaries graded according to success, scholarship, and experience. Leave of absence granted to attend school.

Logansport, Ind.—Salary of teachers increased by attendance at summer terms of universities, taking approved courses.

Muncie, Ind.—Salary graded according to merit.

Muscatine, Iowa.—Credit is given for full six weeks summer work in a recognized normal school and for regular college credits. Teachers having extra college or normal work the past summer since records were compiled, or at any time hereafter, may have same entered to their credit by filing a certificate showing work done.

Sioux City, Iowa.—No teacher will be promoted from class A who does not receive a rating of good. No teacher will be promoted from class B who does not receive a rating of strong. Teachers who do not receive the rating of strong, but who receive special commendation for effort may be continued in class B at $600. Teachers of classes A and B who receive superior rating may be advanced not more than two points in their salary schedule.

Leavenworth, Kans.—All teachers progress in salary from the minimum, $50, to the maximum, $90; but teachers of exceptional ability are advanced by recommendation of the principal and superintendent, acted upon by the board. This means that teachers are advanced so many years, but never above the maximum.

Topeka, Kans.—Professional reading and study.

New Orleans, La.—The most significant change is in the matter of salary increase on a basis of efficiency. To secure this increase, teachers must be rated "superior" in teaching efficiency and pass an examination in certain subjects. In lieu of the examination, certificates showing the successful completion of the work required in the examination in a summer school of approved standing will be accepted.

Leominster, Mass.—Increase in salary given to those already receiving maximum dependent upon demonstrated efficiency.

Newton, Mass.—Sabbatical year; university courses; salary graded according to quality of service. All in operation.

Methuen, Mass.—Special increase for certain teachers attending summer schools.

Westfield, Mass.—Final increase in salary dependent on special recommendation of superintendent.

Jackson, Mich.—Teachers were divided into four classes: First, those who because of their poor quality were not reemployed; second, a slightly larger class who were reemployed without increase in pay because their work was unsatisfactory and will not be reemployed at the end of the following year unless the character of their work

is materially improved; third, a still larger class who were reemployed at the minimum increase in salary; and, fourth, the remainder of the teaching force, constituting a large majority, who were reemployed at the maximum increase in salary.

Duluth, Minn.—Grading salaries according to quality of service.

Kansas City, Mo.—University courses are carried on, and a system of reading is required of all teachers. Advancement of salary depends upon satisfactory growth in professional interest and aptitude.

Orange, N. J.—Salary graded according to merit of teacher.

Paterson, N. J.—For 10 years Paterson teachers' association has conducted university courses with the assistance of Teachers College, New York, and New York University.

Kingston, N. Y.—Salary graded according to quality of work.

Yonkers, N. Y.—An annual increase in salary for meritorious work has been the plan for several years.

Canton, Ohio—Additional $50 given to teachers who take university courses during the summer.

Lima, Ohio—Salary increases according to quality of service.

Springfield, Ohio—Merit system in vogue for years.

Newark, Ohio—Regular increase is doubled to teachers attending summer session in normal school or teachers' college. Leave of absence granted.

Portland, Oreg.—Lecture courses to be followed by reading and notebook work, for which college credit will be given.

Philadelphia, Pa.—Advance salary denied to a teacher who fails to measure up to a certain standard of efficiency.

Norristown, Pa.—Professional study under direction of superintendent's university extension course. Salary determined by quality of work.

Williamsport, Pa.—New salary schedule adopted June, 1913, which bases promotion on kind of certificate, teaching experience, ability to teach and govern, professional interest, increased scholarly attainment.

Erie, Pa.—According to quality of service, grade meetings, and one-half day monthly institutes.

Charleston, S. C.—Matriculation fees at summer schools paid by school board in the case of those teachers who complete successfully three or more courses.

Houston, Tex.—University extension work accepted in place of institute and study circle work.

Portsmouth, Va.—No teacher's salary is increased beyond a certain figure without the superintendent's indorsement for "special efficiency."

La Crosse, Wis.—Salary graded according to quality of service.

The latest rules formulated in any large city for regulating the advance in salaries of teachers are those now in force in New Orleans. They include the following:

Section 1. *Classification of teachers.*—Teachers shall be classified into three classes, namely, A, B, C. Class C shall include all teachers during the probationary period, including their first three years of service. Class B shall include all regularly appointed teachers who have served not less than three years as teachers in the city schools and not qualified for class A. Class A shall include those who have completed at least four years of service as a probationary and as a regularly appointed teacher, and have earned a rating of "superior" in efficiency in teaching, and have shown an advance in academic and professional scholarship, either through work done in colleges or summer schools during the four years next preceding their application for advancement to class A, or through an examination held under direction of the board.

SEC. 2. *Promotional examinations.*—The subjects required for the promotional examination for grade teachers shall be—Educational psychology, the psychology and pedagogy of three subjects taught in the elementary schools, and one of the following subjects of college grade: English and American literature, algebra, modern history, physics, chemistry, botany, or zoology. For high-school teachers the examination shall consist of the history and principles of secondary education, psychology and pedagogy of the special subject taught by the teacher, adolescent psychology, and the subject matter of the third or fourth year in college in the subject taught by the teacher.

The promotional examination of class A for all special teachers shall include educational psychology, psychology and pedagogy of the special subject, the subject matter of a complete college course in the special subject taught by the teacher, and the subject matter of a first year's college course in a subject auxiliary to the special subject.

SEC. 3. *Exemptions from promotional examinations.*—Certificates from a college or summer school of recognized standing, showing the successful completion of not less than 90 class hours in any of the subjects named above, may be accepted in lieu of an examination in said subject: *Provided*, That teachers submitting certificates showing the completion of 12 courses in summer schools or colleges of recognized standing before October 1, 1914, may have said certificates accepted in lieu of examination in four of the subjects required for promotional examinations to class A.

Teachers in the elementary schools having received a bachelor's degree from a college of recognized standing during the four years next preceding their application for advancement to class A will be excused from the promotional examination, provided that not less than 300 class hours were devoted in their college course to psychological and pedagogical subjects.

Female teachers in the high schools who have received a bachelor's degree from a college of recognized standing during the four years next preceding their application for advancement to class A may be excused from the examination for promotion to class A, provided the subjects included in the promotional examination for high-school teachers have been pursued by them in their college course.

Men teachers in the high schools who have received a master's degree from a university of recognized standing during the four years next preceding their application for advancement to class A may be excused from the examination required for advancement to class A, provided a course of not less than 90 class hours in the psychology and pedagogy of the subject taught by the teacher was successfully completed among the requirements for the master's degree.

SEC. 4. *Application for promotional examination.*—Applicants for promotion to class A who have been graded as "superior" under the provisions of these rules shall signify in writing their desire to stand promotional examination, and such examinations shall be held annually on a date to be fixed by the superintendent between August 15 and September 15.

The rules state in detail the salaries of teachers of the three classes described in section 1. Following is the part referring to teachers of class A:

Class A teachers shall receive a salary of $75 per month for the first year, and if they receive and maintain a rating of "superior" in efficiency, shall receive $80 per month the second, third, and fourth years, $85 per month the fifth, sixth, and seventh years, and $90 per month the eighth and subsequent years.

Class A teachers who fail to receive a rating of "superior" in efficiency shall not be advanced in salary the following year, and those who fall below the rating of "good" in efficiency shall be assigned to class B and receive such salary as they are entitled to under that class.

TEACHERS' COUNCILS.

The recommendation made in the course of the New York survey that a supervisory council be organized and legalized, and the favorable action of the school board thereon, calls attention again to a scheme for enlisting the active cooperation of teachers in school management that has had trial in a few cities. The recommendation was:

> That appropriate steps be taken to secure the creation of a supervisory council to be composed of the city superintendent, all of the district superintendents, and a selected number of directors, principals of training schools, principals of high schools principals of elementary schools, and representatives from the teaching staff in the various types and grades of schools.
>
> To this supervisory council should be given general powers and directions with regard to programs of study and all other essential matters relating to the methods and standards of instruction.

The organization of an advisory council is proceeding in New York along the lines of this recommendation.

Boston's council for the high schools and committees for the elementary schools are described in the superintendent's annual report for 1909.

New Britain, Conn., maintains a school council whose by-laws provide the following membership:

> (1) All principals, ex officio.
>
> (2) All supervisory officers and special teachers, ex officio.
>
> (3) One representative from each elementary grade, including kindergarten, to be elected by ballot by the teachers of the grade.
>
> (4) Representatives from the high school to be elected by the teachers of the high school.

Supt. Alderman, of Portland, Oreg., is asking for an advisory council of principals and teachers. A teachers' round table has been organized in Los Angeles by Supt. J. H. Francis for the discussion of school administrative problems and policies. The round table consists of a kindergartner, eight primary and eight grammar grade teachers, and a representative from each of the intermediate and the high schools and from each of the teachers' organizations. The supervisors of special studies are also members of the round table. It is proposed to discuss from time to time such problems as salaries, books, teaching methods, special activities, etc.

In Boston, New Britain, and Los Angeles the councils derive no power or responsibility from the board of education. They exist and operate on the initiative and under the authority of the superintendent of schools.

On the recommendation of the superintendent, the Chicago board of education has authorized the organization of 14 group councils and

1 general council of teachers. The aim and purpose of the group councils and the general council are: To give full and free expression or voice to the different attitudes and judgments of the teaching force on questions pertaining to courses of study, textbooks, departmental work, duties and advancement of teachers; the general study of educational questions by the entire public-school teaching corps; and to enable the superintendent to become conversant at first hand with these attitudes and judgments.

In Dallas, Tex., a teachers' advisory council was organized in 1909 on the recommendation of Supt. Lefevre. It was recognized by a rule of the board of education and it made reports directly to the board. Instead of bringing about a greater degree of cooperation, it divided, instead of united, the teachers and the superintendent. This council is not now in existence. The present superintendent is quoted as saying:

> We find that we have no earthly use for such an institution. It was the source of more political broils, more prejudices and disputes, and more political activity on the part of teachers than anything ever instituted before in our schools. Certain teachers who were candidates for members of the council were so politically active that they had campaign managers who assisted in pulling the wires, soliciting votes among teachers, and thus securing their election. This one thing got the teachers and the schools into trouble that it will take 10 years to eradicate.

The Dallas council seems to have been organized on a wrong basis. Those now advocating the formation of councils with legal standing in the school system recognize the fact that the superintendent must be at least ex officio at the head in order that the kind of cooperation sought may be possible.

CHAPTER VII.

FIVE YEARS OF KINDERGARTEN PROGRESS.

By Nina C. Vandewalker.

Contents.—A subject of university study—A demonstration of education by development—Status of the training schools—Extension of kindergarten activity—Causes of growth—The national kindergarten association—Cooperation of the Bureau of Education.

A SUBJECT OF UNIVERSITY STUDY.

The fact that the kindergarten has made progress in the few years since the history of the movement was written is sufficiently evident to be beyond question.[1] The extent of that progress is difficult to measure with precision, because there has been no compilation and comparison of statistics at stated periods, but the fact of its progress is clearly observable nevertheless. Among the manifestations are an increase of interest in and a study of the kindergarten on the part of primary teachers and supervisors; a more comprehensive study of the kindergarten in its relation to general education on the part of kindergartners themselves; the raising of the standard of kindergarten training schools; and a marked increase in the number of kindergartens throughout the country.

The fact that the kindergarten is receiving more attention from primary teachers and those engaged in school administration than it has in the past is apparent in many directions, but perhaps in none more so than in the increased number of these who take courses bearing upon the kindergarten in such institutions as the University of Chicago and Teachers College, New York City. In the first-named institution the registration in the kindergarten department the past summer was 50 per cent greater than the summer before, and fully half of those taking the kindergarten courses were primary teachers. A corresponding increase is observable also in the courses at Teachers College. This increased study is due in part to the fact that the necessity for the knowledge in question has been thrust upon both primary teachers and school principals by the demand for a greater number of kindergartens. It is due no less to the tendencies of present-day education. The principle of development is dominant in current educational thought, and the kindergarten which embodies

[1] The Kindergarten in American Education, by Nina C. Vandewalker. Macmillan Co.

that principle is rich in suggestion for the work of the grades. So largely, in fact, have the spirit and methods of the kindergarten been adopted in the grades that a present-day course in primary methods which made no reference to the kindergarten would be considered as lacking its most essential factor. Primary teachers undertake the study of the kindergarten because they recognize that the knowledge contributes to their success, since it enables them to utilize the foundation which the kindergarten has laid. These and similar reasons have impelled school principals and supervisors to take the courses in question. In New Jersey those who aspire to leadership have no choice, since a kindergarten examination is required of all who aspire to principalships.

Courses bearing upon every phase of kindergarten work are now offered at Teachers College, New York. Some of these are intended for kindergartners and those qualifying for kindergarten training and supervision; some are organized with the needs of the primary teacher in mind; and others are intended primarily for those who are preparing for administrative work. There is a course bearing upon "The Relation between the Kindergarten and the Primary School" and another entitled "Educational Theorists of the Nineteenth Century." These are electives; but that none should escape without some knowledge, a discussion of the kindergarten is included in two at least of the required courses, namely, in "Theory and Practice of Teaching in the Elementary Schools" and in "Elementary Supervision." Such courses have been organized in response to expressed needs, and they are taken by those who will occupy strategic positions in the near future.

Other evidence that the kindergarten is gaining in influence is found in the fact that kindergartners themselves are studying their work and its relation to general education in these same universities side by side with primary teachers and school principals. How new this is, only kindergartners themselves can realize. Kindergartners of the past studied Froebel and the kindergarten while in training, to be sure, but that study had too often tended to make them consider the kindergarten as isolated from the school, instead of a part of it. The former kindergarten training courses did not, therefore, furnish an incentive to the larger study of education, such as the courses the universities now offer. Less than a decade ago a kindergartner with a degree could hardly be found, but within the past half dozen years Teachers College and the University of Chicago have granted degrees to scores of kindergartners for which courses in education were a requisite. What has caused this change of attitude, and what does it signify for the kindergarten movement? The answer to these questions calls for a brief glance at the history of kindergarten training.

A DEMONSTRATION OF EDUCATION BY DEVELOPMENT.

When the kindergarten first came to the United States the doctrine of education by development had received but little consideration, and it was because the kindergarten furnished a practical demonstration of that doctrine that it attracted much attention. The training courses that were organized naturally placed their emphasis upon the exposition of the Froebelian doctrines and the technique of kindergarten procedure.[1] Since the Froebelian conception of education was recognized by all as higher than that upon which prevailing education was based, kindergartners came to think of kindergarten education as of a higher order than school education and of general educational theory as having little value for them. The training given, therefore, concerned itself with the kindergarten as such only, and gave little heed to educational procedure in general. Because it considered the exposition of the kindergarten as its chief purpose, and lost sight of the whole of which the kindergarten is a part, it gave students a one-sided conception of Froebelian doctrines. Kindergarten training, therefore, became narrow, and the procedure of the kindergarten was stereotyped and out of harmony with the principle of development which it, supposedly, exemplified.

THE COMMITTEE OF NINETEEN.

While kindergarten training and procedure were thus tending toward isolation from the school, an awakening was taking place in general education which was to counteract this tendency.[2] Researches in biology and psychology showed the principle of development to be the principle upon which true education must be based, and as a result of the clearer insight into the nature of education a reorganization of the aims and methods of general education was undertaken. In this reorganization the kindergarten was recognized as a type of the education desired, and it furnished many suggestions for the work immediately following. Because the facts of the child's development were but imperfectly known when the kindergarten was organized, however, it also was shown to have defects which needed remedying in order to make it an organic part of the school system. Some kindergartners accepted the criticisms made and endeavored to free kindergarten procedure from its defects. Others did not consider the criticisms valid, and adhered to the established forms. In consequence diversity of procedure began to appear and the

[1] See "Froebelian Literature in Kindergarten Training." Kindergarten Rev., Vol. XXI, p. 56 ff.

[2] See "Views of Liberal Kindergartners of Committee of Nineteen." Proceedings of Sixteenth Meeting of I. K. U., p. 123.

public was at a loss to know what constituted true kindergartening. It was to discuss questions of this character that the International Kindergarten Union in 1903 appointed a committee, eventually known as the Committee of Nineteen, composed of those who held opposing views as to where the authority determining kindergarten procedure lay—whether in Froebel alone or in Froebel's views only so far as they are sanctioned by present-day scientific knowledge. Through the deliberations of this committee, which have extended over nine years and have been but recently completed, kindergartners have been made aware that present-day educational theory furnishes a different basis for kindergarten methods than the traditional one, and that the results to be obtained upon this basis are of a higher order. This has created an attitude toward general education, and even toward the kindergarten itself, that is new to many—the attitude of inquiry.

Kindergartners are beginning to realize that if the kindergarten is to fulfill the function in the educational system which recent educational theory has assigned to it, both kindergarten and school alike must take the present-day knowledge of the child's development and the present-day interpretation of life as the basis of their procedure. On this basis, however, a knowledge of Froebel alone will not be a sufficient equipment. It is because of this realization that kindergartners in such numbers are taking university courses in education. The kindergartner and the primary teacher alike realize that neither can do her part fully in furthering the child's development without a knowledge of the work of the other, and both have enrolled in university courses. The openness of mind that now characterizes many kindergartners is one of the most gratifying evidences of kindergarten progress. It is this attitude which will make further growth possible.

STATUS OF THE TRAINING SCHOOLS.

The fact that kindergarten instruction is now given in the largest university in the United States and in several smaller ones means much to kindergarten training. It can not be doubted that the quality of the kindergarten work throughout the country will be materially improved by such instruction. The improvement will be slow, however, unless the training given in the 150 institutions of narrower aim is good also.[1] Had the training in these been better during the past 20 years, the kindergarten would now occupy a much larger place in public favor. The training is still meager in many schools, but the standard has been raised materially during the past five years. In this respect, as in others, it is difficult to measure

[1] See "The Standardizing of Kindergarten Training." Kindergarten Rev., Vol. XXIV, p. 72.

progress, because of the lack of adequate statistics. The committee of investigation, appointed by the International Kindergarten Union, has secured fairly complete data concerning the training schools of the present as to character, entrance requirements, length of course, and number of students. By comparing the facts thus obtained with those collected by Miss Clara L. Anderson in 1903 marked progress is observable in certain directions. Neither of these inquiries attempted to secure data concerning the curricula and method of the training schools, however, and no definite information can therefore be given concerning progress along these lines.

A comparison of the statistics of 1903 with those of 1913 shows that the number of institutions that give kindergarten instruction has not been greatly increased during that period, but that there has been a marked change in the character of the institutions. In 1903 there were over 90 training schools that were private or charitable in character and only about 50 that were supported by State or city funds. In 1913 there were fewer than 70 private and charitable training schools and nearly 90 supported by public funds. During the decade 20 of the smaller private schools and 2 or 3 of the larger ones, including Mrs. Putnam's in Chicago and Mrs. Phoebe Hearst's in Washington, have been discontinued. The kindergarten departments in from 15 to 20 of the State or city normal schools have been discontinued likewise. This loss has been fully compensated, however, by the establishment of others of even greater importance. Of the 40 new training schools or departments established, but 12 are private. Among these the most important are the training schools established by the New York Kindergarten Association and the Froebel League in New York City, and the one at South Bend, Ind. Among the most important of the 28 public institutions that have added kindergarten departments are the normal schools of the State of Washington; the Illinois Normal University; the normal school at Montclair, N. J.; the Western Michigan Normal; the normal school at Superior, Wis.; the normal schools at Farmville and Harrisonburg, Va.; and the city training schools of New York and Brooklyn. This list does not include the kindergarten departments in the normal schools that are used for purposes of observation only—about 18 or 20 in all.

The decrease in the number of small private training schools and the increase of those supported by public funds are in themselves a proof that the kindergarten is gaining in favor among school authorities. The kindergartners who have exchanged private for public work have become more vital factors in the progress of the kindergarten because of that fact. No kindergartner can work in a normal school where problems of general education are constantly considered without getting some conception, if only by absorption,

of present-day educational theory and practice, and her views of her own work are thus greatly enlarged. No one worthy of a position in such an institution can help realizing that standards of scholarship prevail in the training of grade teachers that should prevail in the training of kindergartners likewise, but those standards have been ignored in the past in the kindergarten training schools. The increase in public training schools has therefore meant an increase in the number of kindergarten training teachers who have adopted a broader view of kindergarten education and who see the necessity for higher standards.

It has been stated already that no statistics have been collected concerning the curricula and methods of the kindergarten training schools, and, in consequence, no statement based upon figures can be presented to show that improvement has been made along these lines. There is much evidence of such improvement, however. The kindergartners with advanced training have evidently succeeded, as they are increasingly sought by school superintendents and normal-school presidents. The demand for them, in fact, is far in excess of the supply.

From the observation of the work of some of the schools and from reports concerning that of others, it is apparent that courses of kindergarten instruction are under reorganization in many training schools, both public and private, and that the methods have a better pedagogical basis.

EXTENSION OF KINDERGARTEN ACTIVITY.

The most noticeable evidence of kindergarten advancement is found in increased numbers. On this point, too, the International Union has fairly complete statistics concerning the present status of the kindergarten, but the corresponding statistics of earlier periods are not full enough for thoroughly satisfactory comparisons. A comparison of the statistics of 1913 with those collected in 1903 shows the progress made during a decade as follows: In 1903 there were in the United States over 4,000 kindergartens in about 900 cities and villages. Of this number, nearly 900 were private, 600 charitable, and 2,500 public. Together they enrolled about 200,000 children. In 1913 there were 8,880 kindergartens reported in 1,105 cities. Of these, nearly 700 are private, 567 charitable, and 7,600 public. The enrollment in the private and charitable kindergartens is not quite 30,000, and that in the public ones 276,000. The total kindergarten enrollment is therefore 306,000.

It is interesting to note the growth in the different groups of States. In New England the kindergarten has but little more than held its own. The number of cities reported as having kindergartens

in 1913 is, in fact, slightly smaller than the number in 1903. This is true also of the number of private and charitable kindergartens. In the public kindergartens there has been a fair increase, however—from 416 to 597. In the group containing New York, New Jersey, Pennsylvania, and Delaware the number of cities with kindergartens and the number of private and charitable kindergartens has also decreased, but the number of public kindergartens has risen from 1,432 to 3,613. In the 16 Southern States there is an increase all around. The number of cities has increased from 150 to 173; the number of kindergartens other than public from 260 to 324. The number of public kindergartens has increased more than threefold, having risen from 192 to 681. In the 7 States of the Central West, namely, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, and Iowa, the growth has been equally marked, with the exception of the number of kindergartens not public, which has decreased from 380 to 299. The number of cities has risen from 246 to 460, however, and the public kindergartens have more than trebled here also, having increased from 793 to 2,650. In the remaining 15 States—the two Dakotas, Nebraska, Kansas, and those still farther west—the kindergarten has secured but a slight foothold, excepting in Nebraska, Colorado, and California. Progress has been made there also, though the number of private and charitable kindergartens has decreased from 157 to 125. The number of cities having kindergartens has risen from 117 to 145 and the number of public kindergartens from 214 to 508.

The figures for the whole United States furnish evidence of progress that can not be doubted. It is significant that though the number of private and charitable kindergartens has decreased during the decade, the public kindergartens have trebled in number.

It is interesting to note how the States rank in this accounting. In the number of cities having kindergartens, Wisconsin leads with 142; Michigan is second with 128; and New York third, with 92. In the number of kindergartens, New York leads; Ohio is second; and Wisconsin is third. In the number of children enrolled New York again leads; Illinois is second; and Michigan is third.

CAUSES OF GROWTH.

The causes for the progress recorded are complex, but, broadly speaking, they may be reduced to two. The first of these is found in the tendencies of present-day education and the standards of kindergarten work which have been set by public-school authorities. How these have operated to bring about kindergarten progress has already been discussed. The second reason is to be found in the faith of kindergartners in the inherent value of the fundamental doctrines on which their work is based and in their concerted efforts to win

for those doctrines a larger influence in American education. It was to create an agency by means of which that influence might be exerted that the International Kindergarten Union was organized 21 years ago, and it is to the cumulative efforts of that body, in no small degree, that the growth of kindergarten activity has been brought about. The meetings which it has held in the largest cities of the country, the work that has been done by the committees it has appointed, and the cooperation in the direction of kindergarten extension which it has effected with the National Congress of Mothers, the General Federation of Women's Clubs, and the National Education Association—all these have been means to the ends, whose results have become apparent in the past five or more years. It was because the leaders in the International Kindergarten Union saw the need of definite knowledge concerning the status of the kindergarten that the organization appointed a committee of investigation in 1911 to make the inquiry whose results are recorded in this paper. That inquiry was recognized as but a part of a systematic campaign of propagation. It is in such a campaign, which has hardly more than begun, that the National Kindergarten Association, of which more will be said, has rendered invaluable service. Equally vital to the movement has been the work done by the committee on training and supervision. The committee has conducted each year in connection with the meeting of the International Kindergarten Union a conference of training teachers, at which topics of vital importance in the training of kindergartens have been discussed. These conferences have been devoted largely to reports of studies made during the year of some phase of training work, such as the training school curriculum, the method of teaching a given subject, or the organization of the practice teaching. Sometimes they have been given to a discussion of topics upon which there were legitimate differences of opinion, akin to those of the committee of nineteen. It has been in the training teachers' conferences, arranged by the committee on training, that kindergarten thought and practice have, in great measure, been shaped. During the past five years the International Kindergarten Union leaders have seemed to sense the needs of the kindergarten in a marked degree, and the present growth is in part a result of that fact.

THE NATIONAL KINDERGARTEN ASSOCIATION.

The National Kindergarten Association, which has but recently come into the field, has also done effective work in furthering kindergarten progress. This organization has confined itself chiefly to the awakening of public interest in the kindergarten and to establishing kindergartens where they had not yet been adopted; but it has set many agencies into operation to effect these purposes, and its results

have been far-reaching. The story of its origin is thus told in one of its reports:

> The National Kindergarten Association sprang into being as the direct result of the fact that a young mother was unable to find good kindergartens for her little boys in either of two large cities in which they lived in Pennsylvania and New Jersey. In 1906, she suggested that a national society was greatly needed to arouse interest in the kindergarten and to help establish good kindergartens after the interest had been awakened. During three years considerable time and thought were expended in investigation, and it was found that such societies existed in other parts of the world, and that there was in the United States a large amount of most important work which could and should be done.

After much preliminary work, two meetings were held in New York City in 1909, and as a result the association was formally organized. The active work of the association began in January, 1910.

The admirable work which this association has been able to accomplish for the kindergarten cause has been made possible by contributions from persons in different parts of the country who are interested in kindergarten education and able to give financial assistance. The association assumed in the beginning that such assistance would be willingly given if the value of the kindergarten to the 4,000,000 children between 4 and 6 years of age in the United States could be made clear. The fact that millions of dollars are contributed annually to the colleges of the country justified that assumption. In its anticipations the association has not been disappointed. The contributions received have enabled it to collect much needed information concerning the kindergarten movement and to carry out important lines of work tending to kindergarten propagation. Among these have been: (1) Preparing leaflets containing information about the kindergarten and distributing them at meetings of women's clubs and teachers' associations; (2) furnishing speakers on kindergarten subjects at such meetings without expense to the organizations themselves; (3) sending out loan libraries on kindergarten subjects and exhibits of kindergarten work and materials; and (4) establishing, in a few instances, demonstration kindergartens in strategic localities for short periods. In addition to this, the association has worked with the educational and other authorities of certain States for the enactment of legislation making the establishment of kindergartens possible. The association has already been a large factor in the development of interest in the kindergarten, and the results of its efforts will become increasingly apparent as the years pass.

COOPERATION OF THE BUREAU OF EDUCATION.

One of the most gratifying occurrences of recent years is the establishment of a division of kindergarten statistics in the bureau of education. This is the outgrowth of the commissioner's conviction

that the kindergarten has a value for American education, and that it should form an organic part of the school system. This division is designed to collect important information at stated periods for the purpose of determining the needs of the movement and of measuring its progress. Such information will aid intelligent and comprehensive constructive work. As a means to the constructive work in question a committee has been designated, composed of leading kindergartners, to cooperate with the Bureau of Education in gaining needed information concerning the kindergarten training schools, and later to work toward their unification and standardization. The committee has organized subcommittees to give assistance in other lines. One of these is to furnish expert advice on questions of kindergarten policy as it may be needed, and another is to arrange for a series of bulletins for publication by the bureau.

It is because of the evidences of progress enumerated that the friends of the kindergarten are encouraged over the outlook. They realize, however, that although much has been done, the work to be accomplished has hardly more than begun. To secure for the 4,000,000 children of kindergarten age in the United States the privileges which have thus far been secured for but 300,000 is the great task that remains. But were this accomplished there would still be need of effort. The spirit which the kindergarten embodies must be infused into the school, for that spirit is too often stifled by formalism when the kindergarten becomes a part of the school. When the ideals of the kindergarten have become the ideals of the school, then, and not until then, will the school be able to render its truest service to the children of America; and not until that condition has been reached should the friends of the kindergarten cease in their efforts for its advancement.

CHAPTER VIII.

RURAL EDUCATION.

By A. C. Monahan,

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Contents.—Work of Bureau of Education for rural schools—Rural school management and supervision; State supervision; increased county supervision—Standard rural schools—The rural school term—Consolidation of rural schools—Limiting the number of grades in rural schools—Classification of schools—Rural high schools—Training teachers for rural schools—Elimination of rural illiteracy—Pupils' reading circles—School funds—Social and civic center movement—School fairs—Community and school improvement associations: Bennington County (Vt.) Improvement Association; Montgomery County (Md.) Country Life Commission; Prescott (Wis.) People's Club; Amenia (N. Y.) Field Day; State and county school improvement associations in the South—Rural education surveys and investigations; the Wisconsin survey; the Ohio investigation; the Vermont survey.

WORK OF THE BUREAU OF EDUCATION FOR RURAL SCHOOLS.

The Division of Rural Education.—The Division of Rural Education of the bureau as now organized is made up of four specialists in rural education, three of whom occupy positions created for the first time in the middle of the school year, and of approximately 60 special collaborators, each paid a nominal sum as a field agent to keep the office informed of important developments in rural education. During the year the attention of three of the specialists has been engaged largely in field studies in rural education, one in the South, one in the Northwest, and one in the Middle West and the East. The fourth spent three months in Denmark, studying the rural schools and folk high schools of that country.

Much valuable work has been done by special collaborators in reporting developments in the parts of the United States in which they are located. Several of them are engaged in special studies. As the majority of them have been appointed during the year, time enough has not elapsed for much completed work in these special studies. Up to date the bureau has published but one bulletin prepared by a rural collaborator. This is Bulletin 1913, No. 23, prepared by E. C. Branson, entitled *The Georgia Club at the State Normal School, Athens, Ga., for the Study of Rural Sociology.* Acknowledgment is due for special reports used in preparing this chapter from the following collaborators: L. J. Hanifan, West Virginia; M. J. Abbey, Utah; Jackson Davis, Virginia; F. C. Button, Kentucky;

W. E. Larson, Wisconsin; C. J. Brown, Louisiana; Marie T. Harvey, Missouri; H. E. Austin, North Carolina; N. R. Baker, Alabama; B. M. Davis, Ohio; and W. H. Smith, of Mississippi.

Publications.—The bureau has published during the year several bulletins dealing wholly or largely with rural education; also a chapter in the 1912 Report of the Commissioner of Education on rural education and one on agricultural education. The bulletins are as follows:

1912. No. 18. Teaching language through agriculture and domestic science.
No. 20. The readjustment of a rural high school to the needs of the community.
No. 21. A comparison of urban and rural common-school statistics.
No. 28. Cultivating the school grounds in Wake County, N. C.
1913. No. 2. Training courses for rural teachers.
No. 6. Agricultural instruction in high schools.
No. 8. The status of rural education in the United States.
No. 14. Agricultural instruction in secondary schools.
No. 23. The Georgia Club at the State Normal School, Athens, Ga., for the Study of Rural Sociology.
No. 26. Good roads arbor day—Suggestions for its observance.
No. 32. An educational survey of a suburban and rural county, Montgomery County, Md.

RURAL SCHOOL MANAGEMENT AND SUPERVISION.

Evidence of the increased interest in rural education is found in the movement for a more efficient management of the schools. This relates particularly to the adoption of a better unit of organization and administration than exists in many States, especially in those organized on the "district" basis—the "single district" basis as it is sometimes called to distinguish it from the township and county unit basis.[1] In five States—Colorado, Ohio, Wisconsin, North Dakota, and Texas—measures were before the legislatures during the 1913 session proposing to abandon the present systems of organization and to adopt the county as a unit. Colorado, Texas, and Wisconsin are now on the district basis, and Ohio and North Dakota are on the township basis. In each of these States it was proposed to establish a strong county board in charge of all schools of the county and a county superintendent to be appointed by the board as the executive officer of the board and the supervisor of the schools. In three of these States the measures failed, largely for a lack of general information regarding the merits of the various systems of organization. In Ohio action was postponed on any bill changing the present organization until the special commission mentioned elsewhere in this chapter shall report with recommendations concerning the public-school system of the State.

[1] Information regarding the unit of organization in the various States is given in Bureau of Education Bulletin, 1913, No. 8.

A bill passed the Wisconsin Legislature, approved in August, 1913, providing for a county board of education in every county to share the responsibility of the school management with the local district school trustees. The remaining power in the management of the schools will continue with the local trustees, but the county board of education will have charge of the work of the county superintendent, and the individual schools will have supervision both in their instructional work and their management such as they never had before. The movement is a long step forward toward the adoption of the county unit plan.

From all parts of the United States comes evidence of increased realization of the need for more and better supervision. State departments of education are appointing officers to give their entire time to stimulating interest in rural education and constructive State-wide work for better rural schools. The actual supervision of the work of teachers and the management of pupils must rest with local supervisors. In New England rural schools are, comparatively speaking, well supervised. Townships employ superintendents, either individually or in groups of two or more, called "union districts." Practically all parts of New England are now organized in supervision districts small enough for the schools to be visited by the superintendent many times during the year. In Ohio township supervision is authorized, but only about one-fourth of the townships have supervisors. The others have no supervision except from the local school board. The number with professional supervision has increased during the year. Many new townships have consolidated their schools and now employ a principal for a centralized school who supervises the work of all teachers employed in the township. In the other States, generally speaking, county superintendents are employed, who with their assistants, in the comparatively few counties where assistants are employed, exercise all the supervision that is provided for rural schools.[1] It is more generally realized that in the average county the county superintendent alone can do little effectual supervisory work. Several ways in which assistance is given to the county superintendent are discussed later in this chapter.

State supervisors of rural schools.—Since the publication of the Report of the Commissioner of Education for 1912, which contains a list of the States employing special State agents to devote their entire time to rural schools, the number has increased to 24. Several other States which formerly employed one supervisor each now have two or more.

[1] Information regarding the unit of supervision is contained in bulletin of the Bureau of Education, 1913, No. 8.

Iowa is now one of the States with such an officer, and his appointment is one of the results of recommendations of the Iowa Better Schools Commission. The 1913 legislature provided for an official in the State department of education to be known as the "Rural school inspector." The Montana Legislature has also provided an officer with the same title. Florida has two State rural school supervisors, one of whom was formerly employed by the State with financial assistance from the Southern Education Board. Both are now paid from State funds. Georgia, where a State supervisor of rural schools has been employed for several years with financial assistance from the Southern Education Board, now has three such supervisors, paid entirely from State funds. With money furnished by the General Education Board a supervisor is employed who is devoting his entire time to the negro rural schools of the State. North Carolina, Alabama, and Arkansas have each added during the year a State supervisor for negro rural schools. Supervisors for rural negro schools are now employed in six States: Virginia, Kentucky, Arkansas, Alabama, North Carolina, and Georgia.

Ohio employs no State rural supervisors, but it does employ district supervisors of agricultural education in elementary and secondary schools, each of whom has approximately one-fourth of the State. They were appointed in 1911 under the provision of the Cahill Act. This act gives to the State commissioner of schools[1] the duty of superintending the agricultural work in the schools and also the power of selecting the four supervisors as assistants. The supervisors have necessarily concerned themselves with all phases of the rural school work and have been a great power in establishing better facilities for rural education.

The table following gives the States employing rural supervisors or rural school inspectors. The Ohio agricultural supervisors are included.

[1] Superseded by the State superintendent of public instruction.

State officers charged with the supervision of rural schools.

States.	Title	Name and address.
Alabama	State supervisor of rural schools	N. R. Baker, Montgomery.
Do	Second State supervisor of rural schools [1]	J. L. Sibley, Montgomery.
Arkansas	State supervisor of rural schools	J. L. Bond, Little Rock.
Do	Second State supervisor of rural schools [1]	L. M. Favrot, Little Rock.
Florida	State inspector of rural schools	G. M. Lynch, Gainesville.
Do	do	Shelton Philips, Williston.
Georgia	State supervisor of rural schools	Miss C. S. Parrish, Atlanta.
Do	do	M. L. Duggan, Sparta.
Do	do	F. E. Land, Dawson.
Do	Second State supervisor of rural schools [1]	George D. Goddard, Milner.
Illinois	State supervisors of country and village schools.	U. J. Hoffman and W. S. Booth, Springfield.
Iowa	Rural school inspector	John Woodruff, Des Moines.
Kentucky	State supervisor of rural schools	T. J. Coates, Frankfort.
Do	Second State supervisor of rural schools [1]	F. C. Button, Frankfort.
Louisiana	State supervisor of rural schools	C. J. Brown, Baton Rouge.
Massachusetts	Agent, State board of education	J. E. Warren, Worcester.
Minnesota	State rural school commissioner	E. M. Phillips, St. Paul.
Mississippi	State supervisor of rural schools	W. H. Smith, Jackson.
Missouri	State rural school inspector	G. W. Reaves, Jefferson City.
Montana	Rural school inspector	C. W. Tenney, Helena.
Nebraska	State rural school inspector	Miss Edith A. Lathrop, Lincoln.
New York	Third assistant State commissioner of education.	T. E. Finegan, Albany.
North Carolina	State supervisor of rural schools	L. C. Brogden, Raleigh.
Do	Second State supervisor of rural schools [1]	N. C. Newbold, Raleigh.
North Dakota	State rural school inspector	N. C. Macdonald, Valley City.
Ohio	Supervisor of agricultural education	J. R. Clarke, Columbus.
Do	do	H. L. Goll, Swanton.
Do	do	S. A. Harbourt, Andover.
Do	do	L. S. Ivins, Lebanon.
Oklahoma	do	E. F. Proffitt, Oklahoma City.
South Carolina	State supervisor of rural schools	W. K. Tate, Columbia.
Tennessee	do	F. B. Frazier [2], Nashville.
Virginia	do	T. S. Settle [2], Richmond.
Do	Second State supervisor of rural schools [1]	Jackson Davis, Richmond.
West Virginia	State supervisor of rural schools	L. J. Hanifan, Charleston.
Wisconsin	State rural school inspector	W. E. Larson, Madison.

[1] The "second supervisors" have supervision of the elementary rural schools for negroes.
[2] Resigned since the close of the school year. Vacancies not yet filled.

State officers in charge of agricultural club work.—In several States there are employed agents as supervisors of boys' agricultural clubs and girls' household science clubs and other organizations doing similar work. In some instances they are employed by the State departments of education, in others by the State university or the State college of agriculture. Their work is with and through rural schools, but they exercise no supervision of general school work.

The 1913 Legislature of Oregon authorized the State superintendent of public instruction to employ two assistants to give their entire time to supervising industrial work in the public schools. The men employed are under the direction of the State superintendent, but are affiliated with the State Agricultural College. The industrial work is largely agricultural.

In Idaho a supervisor of agricultural club work is employed, his salary and traveling expenses being paid from a private contribution. His work, however, is under the full direction of the State superintendent of public instruction.

In Utah a "field expert in industrial education" is employed by the State university. His work consists of the supervision of city

school gardens and rural agricultural clubs, domestic science clubs, and school improvement associations. The president of the university is a member of the State board of education, and through this connection a close relationship of the work of the industrial supervisor is maintained with the State superintendent of public instruction. The work is not closely correlated with that of the State College of Agriculture.

A cooperative arrangement exists in several States between the State colleges of agriculture and the Office of Farm Management of the United States Department of Agriculture, which unite in employing State agents for boys' agricultural club work done under the auspices of the State colleges and the United States Department of Agriculture. In certain instances these agents are working in close cooperation with the State departments of education; in others they are not. The work is new, and it is impossible to say what the final adjustment will be. The States in which such agents are employed are Massachusetts, Ohio, Indiana, Iowa, Nebraska, West Virginia, Kentucky, and Wyoming. In the cotton States the State agents in charge of the farm demonstration work of the United States Department of Agriculture have charge also of the boys' agricultural clubs. In the South the girls' clubs are in the hands of the State organizers of school improvement associations in most of the States in which such officers are employed.

Increased county rural school supervision.—Rural supervision supplementary to that given by county superintendents has assumed several forms. Assistant county superintendents are employed in many States, but as a rule only in the larger counties. They are sometimes called rural school supervisors. They work with the county superintendent and under his direction in whatever part of the county they may be most needed. In West Virginia and Oregon these assistants are "district superintendents," and confine their work to special districts. They are, however, under the authority of the county superintendents. In West Virginia this district is the magisterial district; in Oregon it is an arbitrary school supervisory district determined by the county board of education. In other States assistant superintendents or supervisors confine themselves to some particular phase of the educational work of the county. These are the primary supervisors, industrial supervisors, supervisors of instruction in agriculture or in the household arts and sciences, etc. In a few States there are rural school supervising principals; that is, principal teachers in country buildings with two or more rooms who devote part of their time to supervising groups of surrounding smaller schools.

This supplementary supervision is therefore given by the following officers:

(*a*) Assistant county superintendents.
(*b*) Rural school or county supervisors.
(*c*) District superintendents or supervisors.
(*d*) Supervisors of special subjects.
(*e*) Supervising principals over a group of schools.

Probably in every State with the county unit of supervision assistant superintendents or rural school supervisors are employed in a few of the large and progressive counties. Much progress has been made during the past year or two in providing such officers, particularly in the Southern States. Until 1911 practically no assistants were provided in any Southern State; in 1912–13 over 100 were employed. This includes about 70 employed in the State of Kentucky, all of whom began work in the fall of 1912. In addition to this, West Virginia now has 64 district superintendents. This is an increase of 22 over the previous year. It means that now practically 18 per cent of the magisterial districts of the State employ district superintendents; that in one-half of the counties one or more superintendents are employed, and that 2,000, or nearly one-third of all of the rural teachers in the State, are teaching in supervised magisterial districts.

Oregon has the same number of district supervisors as last year, as the law providing district supervisors in that State is mandatory, and not merely permissive as in West Virginia. An attempt was made during the 1913 session of the legislature to repeal the supervision law passed in 1911, on the ground that district supervision is unnecessary and expensive. A measure allowing each county to decide for itself whether or not it should have district supervision passed the lower house, but was defeated in the upper house by an overwhelming vote.

Several States without previous legislation for the purpose have recently passed laws providing for assistant county superintendents or rural school supervisors. The new Wisconsin law providing for county boards of education, mentioned before, gives to those boards the authority to appoint assistant county superintendents in all counties with more than 100 teachers. The 1913 Legislature of Tennessee authorized county boards of education to employ county supervisors and to pay them from county funds. In the weaker counties a part of the State equalization fund may be used to pay one-half of the salary of supervisors.

County rural school industrial supervisors are employed principally in the Southern States, both in schools for white pupils and for negro pupils. In schools for white pupils such supervisors are found in approximately 25 counties in Virginia, Georgia, and Louisiana. The movement has made more headway among negro schools than among

white schools, because of the fact that the Jeanes Foundation, a fund for the benefit of negro education, has been used to assist in the employment of negro industrial supervisors. Such officers are paid from the Jeanes Foundation in nearly 125 counties in 12 Southern States.

In a comparatively few counties scattered throughout the United States there are supervisors of special subjects, such as agriculture, household arts, science, music, drawing, etc. In widely separated States supervisors of primary work are employed. Counties in Maryland, Tennessee, Texas, and Minnesota are among those reporting primary supervisors. The agricultural supervisors and domestic science supervisors in some instances are in charge of boys' and girls' agricultural and household science club work; in other instances, they actually supervise the teaching of these subjects as regular school studies in all schools of the county. For example, Box Elder County, Utah, organized with the entire county as one school district, employs a county superintendent and four assistants—a primary supervisor, a supervisor of music, a supervisor of art and sewing, and a supervisor of nature study and agriculture. The agricultural supervisor is employed for the entire year, the other assistants for the school year only. The supervisor of agriculture has oversight of instruction in agriculture in the schools and spends his summer months in the field with the various boys' and girls' agricultural clubs.

As additional examples, several instances in Tennessee may be cited. The Knox County board of education has made the principal of the county agricultural high school supervisor of all agricultural instruction in the county. He receives $1,800 a year, a house in which to live, and a horse with which to travel about the county. His work outside of the principalship of the high school is in large measure with the grammar grades of the county and with three agricultural high schools recently established.

Madison County has a supervisor of agriculture, at a salary of $1,200 per year, who supervises science teaching in all of the schools and has charge of the agricultural demonstration plots maintained at the large schools in the county. His appointment has met with great favor among the farmers in the county and the patrons of the school.

Bradley County has a rural school supervisor at a salary of $55 per month and expenses. Her work is confined largely to the organization of school-improvement leagues and to work through them for the betterment of school buildings. The leagues are raising funds for new school buildings and to beautify and make more sanitary the old buildings. The supervisor is of great assistance to the schools in securing supplies. She also visits as many of the homes of the pupils as possible, particularly those who have dropped out of school or

whose attendance is irregular, to induce them to attend. She also has charge of the girls' tomato and canning clubs in the county.

Davidson County has a supervisor of primary work at a salary of $70 per month. She is the regular teacher of the primary grades in one of the large schools in the county. An assistant is provided for her at the school, who teaches the primary grades during her absence. She outlines the primary work for all of the schools of the county, attends the monthly institutes, and instructs primary teachers in methods and subject matter for the next month. She also visits schools where her services are most needed and does what she can to improve the instructional work.

The principal of a central school supervises the surrounding schools in several places. In Wabash County, Ind., there is in each township a principal, who is required to teach but one-half of his time; the other half is devoted to supervising the other schools in the township. The principal of a school with two or more teachers is always selected. The plan has been in operation for several years and, according to the county superintendent, it is giving satisfactory results.

Franklin County, Ky., is divided into four "educational divisions," each containing from 9 to 14 school districts. Near the center of each division is located a school doing seventh and eighth grade work and the first two years of high-school work. The principals of the central schools are supervising principals of the schools of the division and are required to visit them and to assist the teachers. In addition, they hold regular meetings for all teachers in the division.

In Walla Walla County, Wash., the county superintendent in 1909 divided the county into 12 arbitrary divisions, with one of the larger schools at the center of each division. The principals of these central schools were made supervising principals of the other schools in the division. The principal in each case has very little time to visit the other schools, but the teachers meet regularly at the central school for discussions under his leadership. The plan has been in operation three years, and the results seem to be very satisfactory.

In Arkansas, three schools, two located in Faulkner County and one across the line in Van Buren County, have employed a district superintendent for the past three years. He gives one-third of his time to each school, all of which are graded schools with two years of high-school work, employing altogether 11 teachers. The superintendent spends Monday and Tuesday at one school, Wednesday and Thursday at the next, and Friday at the third, returning to his home Friday evening. The second week, he spends but one day at the first, two at the second, and then two days at the third school.

In addition to these methods of assisting the county superintendent, several plans have been tried to increase the efficiency of the county

superintendents themselves. In Iowa, a law passed in 1913 provides for the appointment of the county superintendents by the school directors, instead of election by the people, as formerly. Beginning in 1915, the county superintendents will be elected for a three-year term by the presidents of the boards of education of each "school township, city, town, or village independent district, and each independent consolidated district in the county." Townships divided into independent rural districts have but one vote. The boards of directors of the several independent school districts meet and appoint one delegate to represent the entire township to attend the meeting held for the purpose of electing a county superintendent. To be eligible for election, candidates must hold a five-year State teacher's license and must have had at least five years' experience in teaching or supervision.

A new law in North Dakota providing for the election of county superintendents and of the State superintendent directs that the names of the candidates be placed on a separate ballot without anything to designate the political party to which they belong. In this way it is expected to remove the election of school officers from political influence.

Wisconsin, while not materially changing the method of election or the powers and duties of the county superintendents, has provided a county board of education to oversee the work of the county superintendent. The board fixes the superintendent's salary, engages and fixes the salary of an assistant county superintendent and of an office clerk. The county board are therefore in position to require of the superintendent a higher grade of efficiency than ever before.

Until the present year the county superintendents of Alabama have never been required to visit and supervise their schools. A new law in effect in 1913 requires them to spend their entire time in supervising their schools.

In Arkansas but few county superintendents have been employed in the past, but a great effort is making to have each county adopt county supervision. Fifteen are now engaged and nine others will be elected in 1914.

The Texas Legislature considered a bill requiring the employment of county superintendents in all counties of the State. In approximately 60, or one-fourth of the counties, the county judge is now ex officio superintendent of schools. The bill failed to pass. The discussion created by the introduction of the bill caused several counties to obtain superintendents.

The State Board of Education of Louisiana held, during the past year, a one-week summer school for her parish superintendents. It was held at the State University at Baton Rouge, under the immediate direction of the State superintendent of public instruction and the

State supervisor of rural schools. In addition to the parish superintendents, all assistant superintendents were present, and also the teachers of agriculture in the 28 agricultural high schools of the State. These teachers have charge of the boys' agricultural clubs in their counties. There were also present the teachers of domestic science in the same schools, who are required to supervise the girls' canning clubs in their respective counties, in addition to their high-school work. A feature of the summer school was the instruction given in rural education by the State rural-school supervisor, and by the State agent in charge of agricultural-club work. A representative of the Jeanes fund, part of which is expended in the State for negro education, discussed the problem of negro education; and a specialist in rural education from the United States Bureau of Education presented some of the phases of rural supervision in its broader aspects.

This idea of a summer school for county superintendents is new. Several other States are holding one, two, or three day meetings of their county superintendents. They are conferences, however, and not schools in which definite instruction is given. A school one week in extent, similar to that of Louisiana, was held during the summer of 1913 for the county inspectors in the Province of Ontario, Canada, by the provincial department of education. The State Teachers' College at Greeley, Colo., gave special work for county superintendents on rural problems in the summer school during the 1913 session. A program covering one week was arranged, to which county superintendents not enrolled in the regular summer school were invited. For four years past the Massachusetts Agricultural College has been offering special work in elementary agriculture and in rural economics and sociology for rural school superintendents in regular summer school courses. In addition, the institution has held each year a country-life conference at which much time has been devoted to rural-school problems. A special effort has been made each year to secure the attendance of rural-school superintendents. The State normal school at Kirksville, Mo., held during the summer of 1913, a conference for county superintendents, to which the superintendents of the 25 counties composing the normal school district were especially invited. The week consumed by the conference was devoted principally to a discussion of ways and means of making the work of the county superintendent more efficient.

County school board conventions.—In several States organized on the district or township basis the school trustees are required to meet once a year as a county school board convention for the purpose of discussing ways and means of improving schools. In every county in Pennsylvania the township directors meet in annual convention. For this they are allowed a per diem and mileage. The directors elect their own officers, who, together with the county superin-

tendent, prepare a program for the day. At each county directors' meeting delegates are appointed to attend the State directors' meeting. The effect of these county meetings has been of considerable importance in making progress uniform throughout each county.

The school trustees in Indiana have had meetings somewhat similar in purpose. The Legislature of Wisconsin in the 1911 session provided for county school board meetings in that State. During the past year they were held in every county. Representatives of the State department of education attended the meetings. The meetings did much to stimulate activities for better rural schools. The teachers of the several counties will attend the meetings during the present year.

Each county superintendent in Missouri was authorized by the legislature at the 1913 session to call together every year the presidents and clerks of the district school boards as a county school board convention. The delegates to these conventions will receive a per diem of $1.50 and mileage (5 cents per mile one way) which will be paid from the incidental fund of each school district.

Several counties in Illinois have county board conventions. Kane County has an organization known as the Kane County School Officers' Association. It is open to all school officers of Kane County, but the larger number of the active members come from rural and village schools, rather than from the city schools. This organization has been very helpful in increasing interest in school matters throughout the county, particularly in the improvements in physical conditions.

STANDARD RURAL SCHOOLS.

There is considerable activity in the movement for the improvement of the physical conditions of the country and village schools in regard to both general appearance and suitability for school purposes. In several instances the activity was inaugurated and fostered by State departments of education. In other instances it is under the leadership of county boards of education or of county superintendents.

One plan in general use, which has been successfully tried by several State departments and by several county superintendents is as follows: First, the authorities fix a definition of a "standard," "superior," or "improved" school. They then prepare score cards on which the schools may be rated; and a banner, diploma, or plate is awarded to each school whose score is sufficiently high. In many cases the scheme concerns itself not alone with the physical conditions of the school, but also with the teacher, the course of study, the program, and with special features of instructional work.

The Illinois plan.—In Illinois, where such a plan was put into operation by the State department of education in 1911, two grades

of rural schools and village schools are recognized, "standard" and "superior." A plate bearing the words "Standard School" or "Superior School," is given by the State department to the school reaching the required standard. The plate is installed on the front of the building, where it may easily be seen by passers-by. A school is approved and the plate is awarded only after a personal inspection by a representative of the State department of education; and a plate may be recalled at any time if the school falls below the fixed standard.

The manner of procedure is as follows: One of the State supervisors of rural and village schools, upon the invitation of the county superintendent, accompanies him to schools in his county. The State official and the county superintendent meet the school directors at each school and inspect together the grounds, house, furnishings, heating, ventilating, library, water supply, outhouses, qualifications of the teacher, and the teaching and conduct of the school. If the inspection shows satisfactory conditions the diploma is awarded; if not, the unsatisfactory conditions are pointed out. Of more than 700 schools standardized up to the present time, less than one-fifth were up to standard when first inspected.

The requirements for "standard" schools are as follows:

YARD AND OUTBUILDINGS.

1. Ample playground.
2. Good approaches to the house.
3. Two well-kept, widely separated outhouses.
4. Convenient fuel houses.

THE SCHOOLHOUSE.

1. House well built, in good repair, and painted.
2. Good foundation.
3. Well lighted.
4. Attractive interior decorations.
5. Good blackboards, some suitable for small children.
6. Heated with jacketed stove in corner, or a room heater and ventilator in corner, or basement furnace which brings clean air in through the furnace and removes foul air from room.
7. Floor and interior clean and tidy.

FURNISHINGS AND SUPPLIES.

1. Desks suitable for children of all ages, properly placed.
2. Good teacher's desk.
3. Good bookcase.
4. A good collection of juvenile books suitable as aids to school work as well as general reading. Pupils' reading circle organized.
5. Set of good maps; a globe; dictionaries; sanitary water supply.

THE ORGANIZATION.

1. School well organized.
2. Classification and daily register well kept.
3. Definite program of study.

4. Program of recitation.
5. Attendance regular.
6. At least seven months' school.
7. Discipline good.

THE TEACHER.

1. Education: The equivalent of a high-school course.
2. Must receive at least $360 per annum.
3. Ranked by the county superintendent as a good or superior teacher.
4. Must read Teachers' Reading Circle books and attend institutes and meetings.

The "standard school" is one "which has all that a school must have to be a good school." A "superior school" is one "which has everything that a school should have to make it the best school." The requirements for the Illinois "superior" one-teacher school are as follows:

GROUNDS.

1. Playgrounds at least one-half acre and kept in good condition.
2. Level, covered with good sod.
3. Some trees and shrubs.
4. Well or cistern and sanitary drinking appliances.
5. Two outhouses widely separated and well kept.
6. Good convenient fuel house.

HOUSE.

1. Ample schoolroom.
2. Separate cloakroom for boys and girls.
3. Outside painted; in good repair.
4. Inside walls properly tinted and clean.
5. Lighted from one side, or from one side and rear.
6. Adjustable windows, fitted with good shades.
7. Floor good and clean.
8. Heated with basement or room furnace which brings in the pure and removes the foul air.
9. Sufficient blackboards, some within reach of little children.
10. Desks of No. 6, 5, 4, 3, 2, placed each side in a row, properly spaced.

FURNISHINGS AND SUPPLIES.

1. A good teacher's desk.
2. Two chairs.
3. A good bookcase.
4. At least 80 library books, 10 suitable for each grade.
5. A good school encyclopedia.
6. Three dictionaries suitable for high school, grammar, and intermediate grades.
7. Writing and examination supplies.
8. Two good wall pictures.
9. Set of good maps.
10. A good globe.
11. A set of measures and scales.
12. A thermometer.
13. All school books for teacher's use.
14. Crayons; erasers; pointer; coal hod; shovel; poker; broom; floor brush; and sweeping preparation.

15. Wash basin; mirror; paper towels.
16. Combination daily and classification register, schedule of school property, including list of library and textbooks, monthly-report cards.

ORGANIZATION.

1. School classified and recorded in register.
2. Program of study and recitation.
3. Formal tests given; papers on file.
4. Certificates of membership and records of reading in Illinois Pupils' Reading Circle.
5. Provision for instruction in elements of agriculture; manual training; domestic arts. Agriculture and nature study notebooks on file.

THE TEACHER.

1. A high-school graduate and some training at a normal school.
2. Holds first-grade certificate.
3. Salary at least $480 per annum.
4. Reads Teachers' Reading Circle books.
5. Attends county institute and teachers' meetings.
6. Makes all records and reports required by the county superintendent.
7. Ranked by the county superintendent as a superior teacher.

STANDARD OF WORK.

1. The work outlined by the State course of study must be well done.
2. The discipline must make good school work possible and tend to establish sound character.

The Alabama plan.—Alabama has adopted a scheme similar to the Illinois plan. Schools there also are approved as "standard" or "superior." They are scored, however, on a percentage basis, a maximum of 20 per cent being allowed on buildings and grounds, 24 per cent on equipment, 26 per cent on "vitalizing agencies," and 30 per cent on administration. It will be noted from the score card reproduced below that special points are offered. Any school scoring 100 per cent is designated "standard" and is awarded a special diploma by the State department of education. Should a school make a total of 120 points, by grading on any or all of the items considered on the score card, it is entitled to a diploma as a "superior school." Schools graded below 100 per cent on the standard school basis are ranked as grade A, B, or C, and as "scrub" schools if their rank is below 60 per cent. The scoring is done by the State supervisor of rural schools if practicable; otherwise by a local committee appointed by the State superintendent of public instruction. As the points differ somewhat from those given on the Illinois requirements above, a copy is included here.

Alabama requirements for a standard and for a superior school.

Items considered.	Points. Allowed.	Earned.
BUILDING AND GROUNDS—20 POINTS. (Select only 10 items.)		
1. House painted outside (required)	2	
2. Plastered or ceiled and painted (required)	2	
3. Windows proper height, none in front of pupils as seated, and mainly on left and rear of pupils	2	
4. Available amount of light, one-sixth of floor space	2	
5. Sanitary floor and sweeping arrangements	2	
6. House latticed underneath or surrounded by cannas or other flowers	2	
7. Roof in good repair (required)	2	
8. Good windows and doors that lock	2	
9. Pure water supply	2	
10. Yard cleared and clean	2	
11. Sufficient number of trees planted or well kept	2	
12. Sufficient number of sanitary closets	2	
Total	24	
MATERIAL EQUIPMENT—24 POINTS. (Select only 8 items.)		
1. "Patent" desks—at least three sizes (required)	3	
2. Desks fastened to the floor neatly, at proper distance apart	3	
3. Good blackboards, covering at least 75 square feet of space	3	
4. Teacher's desk and chair; wall clock	3	
5. Jacketed stove or equivalent ventilating system	3	
6. Sanitary fountain or individual drinking cups	3	
7. Globes, maps, charts, thermometer	3	
8. Mottoes on wall and at least two well-framed pictures	3	
9. State library or equivalent	3	
10. Good translucent shades, State and National flags; apparatus for teaching processes	3	
Total	30	
VITALIZING AGENCIES—26 POINTS. (Select only 13 items.)		
1. Corn club	2	
2. Tomato club	2	
3. Poultry or pig club	2	
4. Reading circle among the pupils or patrons	2	
5. School improvement association	2	
6. Literary or lyceum association	2	
7. Manual arts taught	2	
8. Domestic arts taught	2	
9. Musical instrument in school or vocal music taught	2	
10. Agriculture taught	2	
11. Flowers in yard or house	2	
12. School garden	2	
13. One or more groups of lesson pictures or exhibit work displayed	2	
14. Good facilities for recreation	2	
15. Community paying incidental fees promptly	2	
16. Community paying supplement	2	
Total	32	
ADMINISTRATION—30 POINTS. (Select only 10 items.)		
1. School thoroughly graded (required)	3	
2. School following adopted course of study (required)	3	
3. Methods of instruction	3	
4. School routine, such as handling water, fires, ventilation, etc.	3	
5. School business, such as keeping register and making reports	3	
6. School enrollment (75 per cent of census)	3	
7. Average attendance (75 per cent of enrollment)	3	
8. Length of term (minimum, 7 months)	3	
9. Salary of teacher (minimum, $350)	3	
10. Discipline	3	
11. First grade or life certificate for principal	3	
12. Well-kept daily-attendance register and monthly report cards	3	
13. Daily program posted	3	
Total	39	
Grand total	125	

The West Virginia score card.—West Virginia has adopted a score card, so that all county superintendents may score their country schools upon the same basis. The "efficiency score card," as it is called, provides for rating as follows:

	Points.
1. Grounds	10
2. Building	15
3. Light and ventilation	8
4. Decorations	8
5. Water supply	10
6. Equipment	22
7. The teacher	27
Total possible	100

Schools scoring between 90 and 100 points are rated as class A; between 80 and 90 as class B; between 70 and 80 as class C; between 60 and 70 as class D; and below 60 as class E.

The State department of education has tried also to encourage improved physical conditions by designating certain days as "clean-up and beautify days," and has issued a special score card on which the teachers are asked to score their building and grounds after the day's work. A maximum of 15 points is allowed on the card for clean yards, 20 for clean floors and walls, 20 for proper decoration, 15 for clean windows and suitable conditions of sanitation, 10 for a sanitary water supply, and 20 for other general conditions of cleanliness. Schools were rated grades A, B, or C, and lists are published showing the standing of each school.

County standardization.—The county superintendent of Berks County, Pa., Mr. E. M. Rapp, began standardizing his one-room country schools some years ago. There are 350 one-teacher schools in the county. The standard set is high. The scoring is done by the superintendent. A four-page circular is put into the hands of each teacher, setting forth 50 minimum requirements for the standard school. The teacher and the organization count 75 points, the physical equipment, including building, grounds, sanitary arrangements, etc., 25 points. Approximately 150 of the 350 one-teacher schools have come up to the requirements and have received diplomas. The names of these schools are published in a monthly bulletin issued by the county superintendent. Mr. Rapp has the following to say concerning the success of the plan:

> Nearly every one of the 350 single-room schools made effort to qualify in some of the specified conditions in order eventually to reach the desired goal. Directors are vitally interested in the project, and in several instances this resulted in the erection of first-class buildings with all modern improvements. It was largely instrumental in the installation of 150 sanitary room furnaces, combining a system of heating and ventilating, and also in the installation of a number of sanitary bubbling fountains

for one-room schools. The school code making mandatory the display of the flag, planting of trees, and improvements of outbuildings greatly facilitated this movement.

Similar plans are followed by probably three-fourths of the county superintendents of Oregon. Polk County may be taken as a type. There wall posters are supplied to the schools, containing a list of standard school points. The list is as follows:

Polk County, Oreg.—Standard school points.

Flag—Must be flying in good weather.
Schoolhouse—Properly lighted and ventilated.
Conditions of schoolroom—Attractive.
One standard picture—One new picture during the year unless four good ones are already in room.
Drinking water—Either fountain or tank and individual cups.
Outbuildings—Sanitary all the time.
Walks—From road to house; from house to outbuildings.
Grounds—Drained; attractive; flowers on grounds or in rooms.
Spelling contests—Every pupil entered.
Discipline—Good order at all times.
Satisfactory work—On part of both teacher and pupils.
Attendance—Average, 95 per cent for year.
School board—Teacher's monthly reports must show at least one hour's visit by one or more members of the board each month.
Teacher—Attending at least 50 per cent of teacher's institutes and subscribing to at least one educational paper.

When the county superintendent visits the schools he determines in what points the school is satisfactory and places a silver star on the poster before the point. When the school has been awarded a star for each point on the poster, it is given a pennant bearing the words, "Standard School."

THE RURAL-SCHOOL TERM.

Considerable activity has been manifested during the year in efforts to increase the length of the rural-school term. In all the States the rural term is less than the term for urban schools; in the majority of States it is much less. In 1910, the only recent year for which data are available concerning the lengths of the term for urban schools and for rural schools separately, the average number of days in the year for urban schools was 184.3 and for rural schools 137.7. For the United States as a whole the urban schools were in session 46.6 days more than the rural schools. In Rhode Island and Connecticut the difference between the urban and rural session was 3.8 days, while in South Carolina it was 88.5 days. The average number of days in the rural term in the several States ranges from 90 in New Mexico to 190 in Rhode Island. Four States—New Mexico, North and South Carolina, and Arkansas—had a rural term in that year of less than 100 days, while Florida had a term of just

100 days. These averages, however, do not tell the whole story. There is much variation above and below the average, and there are many school districts, and even many counties, where the school term for the past year was not over 60 days.

During the year 1913 several State legislatures passed enactments requiring a longer rural-school term. North Carolina has increased the minimum legal school term from four to six months and has provided a State equalizing school fund to assist counties in maintaining a six months' term. It has passed also a law compelling every child from 8 to 12 years of age to attend continuously for at least four months out of the six. New Mexico has increased the minimum term to five months by legislative action. Missouri has increased the minimum term to eight months and has provided special State aid up to $100 per school to assist in carrying out the law. Such aid is provided only when the school district is raising by taxation the maximum levy permitted by law and is paying a teacher at least $40 per month. In South Carolina a 1-mill State tax was levied, the income of which will constitute the State school fund. Part of this fund, the balance after certain specified appropriations are made, will be used by the State board of education for lengthening school terms.

In North Dakota a law was passed providing State aid to rural schools, the amount of which depends upon the length of term. To receive the highest amount, $150, a nine-months' term is required, among other conditions; to receive the next amount, $100, an eight-months' term. Schools maintained less than eight months may not receive any of the benefits of the act. A law providing aid for consolidated schools requires the schools to be maintained nine months in order to be eligible to aid from the fund.

CONSOLIDATION OF RURAL SCHOOLS.

There has been during the year much activity in consolidating one-teacher rural schools into single central schools to which the children are transported at public expense. In nearly one-third of the States recent bulletins have been published by the State department of public instruction or by the State universities giving information for those working for consolidation. They are an indication of a prevailing opinion that consolidation will do much to remedy the present unsatisfactory conditions in rural education.

The extent of the consolidation movement in any locality depends in large measure upon the rural-school unit of organization. States whose schools are organized with the county basis or the township basis are consolidating much more rapidly than those upon the district basis. Louisiana, for instance, which is organized on the county basis, reports many schools abandoned during the year and

replaced by consolidated schools. Probably more consolidation has been effected there during the past two years than in any other State. Lafayette Parish has few one-teacher schools left, and they will soon be abandoned, for no child in the county lives now at a greater distance than 5 miles from a consolidated school. St. John the Baptist Parish reports that now it has no schools with less than three teachers. Tennessee, also on the county basis, reports that 150 small schools were closed during the year and grouped into approximately 50 larger units; in but few cases are the children transported at public expense. In several other counties, however, consolidated schools have been established with public transportation.

Mississippi has organized 75 consolidated schools during the year, whose children are transported in 100 wagons. The average area of the 75 consolidated districts is 30 square miles; the 75 buildings erected cost approximately $140,000. In three years there have been organized in the State 175 consolidated schools, in connection with which 240 school wagons are used. In the past year Pearl River County replaced 31 schools with 6 consolidated schools, to which children are transported in 21 school wagons; Harrison County, one of the largest in the State, has 15 consolidated schools, and only 30 one-teacher schools are left.

The county board of education of Box Elder County, Utah, has during the past year erected 11 new school buildings, at a total cost of $205,000, which take the place of over 30 old buildings. Twenty wagons have been put into operation to carry the children from the abandoned schools. The high-school work is all concentrated in one large school at Brigham City. Transportation to a maximum of $2 a week is allowed students outside of Brigham City, thus equalizing in part the cost of high-school education throughout the county. West Virginia, which is organized on the magisterial district basis, corresponding very closely to the township basis, reports over 100 schools abandoned and replaced by consolidated schools.

Progress in consolidation in States organized on the single district plan has been necessarily slow. In Colorado, as an example, although great effort has been made to consolidate schools, only six consolidations have been effected during the year. Minnesota, however, has made considerable progress, in spite of the district organization. This has been due largely to special State aid for consolidated schools provided by an act of the legislature, known as the Holmberg Act, which became effective April 18, 1911.

Some of the provisions of this act are the following:

(*a*) It requires on the petition for election the signatures of only 25 per cent of the resident freeholders in each district to be included in the consolidation.

(*b*) Consolidation shall be effected by a majority vote of all districts involved to be cast at one central meeting, whereas the former law left the districts to vote separately on the question.

(*c*) The standard for teachers in consolidated schools is as high as for those of any school in the State.

(*d*) The principals must have the special indorsement of the State superintendent of public instruction.

(*e*) The State superintendent has the authority to set standards for school buildings and for equipment, as a condition for State aid.

(*f*) The State superintendent may make regulations for the transportation of children.

(*g*) Finally, generous State aid is provided for the consolidated schools which meet the approval of the State department of education.

Schools in consolidated districts are classified as A, B, and C. Each must maintain a session at least eight months in the year, must be well organized, and suitable buildings and equipment must be furnished. Class A schools must have at least four departments; that is, four teachers; class B schools, three departments, and class C schools, two departments. The principal of a class A school must hold a diploma from an advanced course of a State normal school and be qualified to teach the elements of agriculture as determined by such directions as are made by the superintendent of public instruction. A school of this class must have room and equipment for industrial work. The principal of a class B or a class C school must hold at least a State first-grade certificate and possess such qualifications as are required for teachers in the State graded schools. Class A schools receive annually from the State $1,500, class B schools $1,000, class C schools $750; and in addition to such annual aid a school in any of the above classes may receive, to aid in the construction of a building, 25 per cent of the cost of the building up to $1,500.

The efficacy of the law may be judged by the number of consolidations effected. From 1900 to 1911, before the Holmberg Act was in effect, only 9 consolidations were effected in the State. In the first year after the passage of the act 60 communities organized under its provisions; 30 of these met the requirements in time to secure State aid for the school year 1911–12; the remaining 30 received aid for the school year 1912–13. These 60 districts were formed by the consolidation of 141 old districts. Twenty-one of the new districts, however, became consolidated school districts under the provisions of the Holmberg Act without increasing in any way the size of the school district. They already contained more than the 12 sections of land required for consolidated schools of class C and were employing two or more teachers. This means, therefore, that 39 districts now replace 120.

The Missouri Legislature in 1913 passed a measure intended to promote consolidation, following the Minnesota plan. The Missouri

law provides that the consolidated district must contain at least 12 square miles of territory and 200 children of school age. Consolidation is effected on the majority vote of the qualified voters of the proposed consolidated district at one central meeting. This meeting may decide also whether or not public transportation will be furnished. However, if transportation is not provided, a school must be maintained within 2½ miles by road from the home of every child of school age. The consolidated school must have a site of at least 5 acres of land and a school building with a general assembly room, which may be used for public meetings of the citizens of the district. The State will pay one-fourth of the cost of the building up to $2,000 and also will pay annually toward the maintenance of the school $25 for each square mile in the consolidated district. This is with the provision, however, that the consolidated school maintain at least a third-grade high school giving one year's work in agriculture.

The 1913 Legislature of Iowa, to encourage the consolidation of rural schools, voted to give $250 for equipment and $200 annually for each consolidated school of two rooms teaching agriculture, home economics, or other industrial or vocational subjects and approved by the State superintendent of public instruction. Consolidated schools of three rooms will receive from the State $350 for equipment and $500 annually; those with four or more rooms, $500 for equipment and $500 annually.

The Tennessee Legislature of 1913 gave each county board of education full power and authority to consolidate schools and to provide public transportation. Ten per cent of the general educational fund of the State may be used to aid industrial work in country schools and to assist the establishment of consolidated schools with three or more teachers.

LIMITING THE NUMBER OF GRADES IN RURAL SCHOOLS.

The movement for consolidated schools goes hand in hand with the movement to limit the number of grades in accordance with the number of teachers. This is largely because the principal argument for consolidation is to obtain more efficient schools than is possible in the one-teacher school system. The one-teacher school is inefficient in comparison with the consolidated school, other things being equal, because the teacher has pupils in too many grades and is required to conduct more classes during the day than there is sufficient time for. When the number of grades is limited to four or five, the one-teacher school, if in a suitable building with a qualified teacher, may be efficient. When the number of grades is limited, the school authorities must make provision for the children after they have completed the grades given. The question of limiting the number of grades has been considered very seriously in several parts of the country during

the past year or two, but particularly in Louisiana. Several parish boards of education have taken up the question and have passed suitable regulations. The usual limit for the one-teacher school in Louisiana, wherever a limit is set, is five grades, and for the two-teacher schools seven or eight grades. St. Johns Parish, with no schools with less than three teachers, limits the three-teacher schools to seven grades. Other parishes which have already adopted grade limits are St. Martin, West Baton Rouge, Iberville, Ascension, St. James, Winn, West Feliciana, Lafayette, Terrebonne, and Union. In all of these parishes provisions have been made for accommodating advanced pupils at some central point in the parish.

The State of North Carolina, while not limiting the number of grades in the one-teacher schools, provides that high-school branches may not be taught in one-teacher schools, and that they may be taught in schools having more than one teacher only after adequate provision has been made for the thorough teaching of the elementary branches. This, in effect, prohibits any one-teacher school from maintaining more than seven grades of work.

Franklin County, Ky., in practice limits the number of grades in the rural schools to six. The county is divided into four educational divisions, each division containing from 9 to 14 subdistrict schools. In each division there has been established a central school for all the children in the division in the seventh, eighth, ninth, and tenth grades. For the last two years of high-school work the children go to the high school at Frankfort.

In Lavaca County, Tex., the rural schools have been classified by a board of five members, of which the county superintendent is secretary. No teacher is permitted to teach more than six grades. Schools with seven or eight grades are required to employ two teachers. If the attendance is above 100 pupils, three teachers must be employed. Districts with a large census enrollment, employing but one teacher, are limited to five grades. Children above the fifth grade are transferred at public expense to some other district with higher grades.

THE CLASSIFICATION OF RURAL SCHOOLS.

The Legislature of North Dakota in the 1913 session made provision for classifying rural schools into three classes by providing special State aid for those who have reached the requirements of what are designated as "Class one" and "Class two." The schools not meeting the requirements of class one or class two constitute a third class. A first-class rural school is one maintained nine months during the school year, taught by an experienced teacher holding a first-grade certificate; the school building must be suitable and the State course of study, which includes agriculture, must be used. These

schools receive annual State aid of $150. A second-class rural school must meet the same requirements as far as the building and course of study are concerned, but it may employ a teacher holding a second-grade certificate and school may be maintained only eight months. Such schools receive $100 annually from the State.

This plan is similar to that adopted in Minnesota by act of the legislature in 1905 and amended in 1909 and 1911. The Minnesota schools are classed as A, B, or C, as follows:

Class A.—Districts employing a teacher holding at least a first-grade certificate and maintaining school not less than eight months in the school year.

Class B.—Districts employing a teacher holding at least a second-grade certificate and maintaining school not less than eight months in the school year.

Class C.—Districts employing a teacher holding at least a second-grade certificate and maintaining school not less than seven months in the school year.

Provided the schools have suitable buildings, libraries, and other apparatus and conveniences, and comply with such rules as may be fixed by the State superintendent of public instruction for maintaining an efficient school, those in class A receive annually from the State $150, class B, $100, and class C, $75. The plan has worked well, and school trustees are providing better buildings and equipment, better teachers, and a longer term in order that their schools may be rated as high as possible and receive the greater State aid coming with the higher classification. The tendency is shown by the following table, giving the number of schools in 1911 and in 1912, in class A and class B, and in 1912 in class C.

Minnesota rural schools.

Years.	Class A.	Class B.	Class C.
1911	2,054	1,213	.....
1912	2,453	1,396	555

RURAL HIGH SCHOOLS.

The movement for the establishment of high schools in the smaller villages or in the open country is making rapid progress. Utah reports that over 40 rural and town high schools were organized during the year. Previously most of the high-school work outside of the larger cities has been done by church academies. The activity in establishing high schools in that State is the result largely of a special legislative grant passed in the 1911 session of the legislature. A high-school inspector has been appointed who is also a member of the faculty of the State university.

Special State aid for rural high schools was provided in 1913 by the Legislature of Missouri. In order to receive this aid a school district must be organized as a town, city, or consolidated school district, and have six school directors. It must levy for school purposes the maximum levy provided by law, which is 100 cents on $100. The school must do at least two years of approved high-school work and employ a competent principal. Each of its teachers must receive at least $40 a month for eight months in the year, and the school must have maintained an average daily attendance of 15 pupils during the past year. The course must include one year in agriculture. Any high school meeting these conditions on June 30 of any year may make application for State aid. If the work is approved, the State aid may be given as follows: A district whose assessed valuation is less than $300,000 may receive $800 per year; if its valuation is between $300,000 and $400,000, $600 per year; if between $400,000 and $600,000, $400 per year; if over $600,000, $200 per year. For any county in which there is no school district with a valuation of over $300,000 and, no high school with an average attendance of 15 pupils or more, the State has made special provision. One district in the county with a village or consolidated organization with six school directors may receive $800 annually, provided the maximum local tax levy is assessed and the school employs a competent principal.

The State of Louisiana is encouraging high schools located in rural sections to become rural schools in fact as well as in name by teaching country-life subjects. There are now in operation 28 high schools with departments of agriculture, each of which receives from the State $1,000 annually for this department. Double that number of schools have filed application with the State department for State aid for the coming year, certifying that they have the land, equipment, and facilities for instruction specified by the State department. There are 20 country high schools with departments of household science. Each of these departments receives from the State treasurer $500 per year. Many additional schools have applied for aid for the coming year. Each teacher of agriculture in these agricultural departments is required, in addition to his work in the high schools, to supervise the boys' corn and hog clubs in the parish under the general direction of the parish superintendent of schools. The teachers of domestic science supervise the girls' tomato and canning clubs.

A new type of State-aided agricultural departments in public high schools has been inaugurated in Louisiana. Ten schools, with from three to five teachers each, located in different parts of the State, have been selected. Each school will receive from the State $100 annually. Each must employ a teacher of agriculture, who shall

spend part of his time, including Saturdays, in supervising agricultural home-project work and club work done at the homes of the pupils as a part of regular school work. These agricultural schools have no school farms, but depend upon the home farm. The schools have hotbeds, from which the pupils may be supplied with early plants for their home-project gardens.

Mississippi has invested in agricultural high schools during the past three years approximately $1,000,000. This money has been raised by bonds, taxes, and subscription.

TRAINING TEACHERS FOR RURAL SCHOOLS.

Throughout the country there has been a marked interest in providing better means for giving professional training to young men and women preparing to teach in the country schools. The training courses for country teachers offered in 1912 by the State normal schools were described in a recent bulletin of the Bureau of Education.[1] Since that time many State normal schools have introduced such courses. Among them might be mentioned the six State normal schools of Oklahoma, which have adopted a uniform course for rural teachers, and the State normal school at Natchitoches, La., which has established a special course for country teachers of equal length and value with other normal courses. Two hundred pupils were enrolled in this course during the year ended in June, 1913, the first year of the course. The new normal school at Hattiesburg, Miss., has adopted courses intended to fit particularly for rural teaching, and the new normal school opened during the year at Valdosta, Ga., has done likewise.

The State of Wisconsin, which assists in maintaining county training schools in 27 counties for training rural teachers, has authorized the establishment of similar schools in six additional counties. A county training school may not be established in a county in which a State normal school is located. However, five of the State normal schools are conducting special classes for preparing rural teachers, which are of the same grade and operate under the same general regulations as the county training schools.

Training courses for rural-school teachers may be established in high schools in counties of Wisconsin in which no county training school exists. The establishment of training courses, both in special schools and in high schools, has been stimulated by the action of the legislature of 1913, which provided that after July 1, 1915, no person shall be allowed to teach in the State of Wisconsin who has not had at least two years' instruction beyond the elementary school course, one year of which shall include professional preparation for

[1] Bulletin, 1913, No. 2: Training Courses for Rural Teachers.

teaching. The county training schools for rural teachers in Wisconsin will be in the future under the management of the county board of education provided by an act of the legislature approved in August, 1913. As this board of education will have general oversight of the schools of the county and of the county superintendent, a closer articulation between the county training schools and the public schools may be expected.

Following the example of 13 other States which have been in the past conducting teacher-training departments either in connection with or in public high schools, the State of Missouri, by action of the legislature of 1913, provided for similar work in that State. The professional courses will be given in the eleventh and twelfth grades of certain first-class approved high schools. State aid will be given, amounting to $750 annually for each school. If more than one school is approved in the same county, $1,200 annually will be divided between them. The law requires that there must be at least 10 pupils in the training class. The management of the training departments is given to the State superintendent. He is empowered to prescribe the entrance requirements, outline the course, dictate the methods of instruction, and fix the requirements for graduation. Upon the satisfactory completion of the course he may grant a certificate, which is a valid license to teach in any public elementary or rural school for two years. A State inspector of teacher training in high schools has been appointed, who will have immediate oversight of the schools introducing these professional courses.

Teacher-training courses in public high schools were established in Iowa in 1911 and have graduated two classes. The legislature of 1913, apparently feeling that the State is now in the position to live up to the law, provided that after July 1, 1915, every applicant for a teacher's certificate must have had at least 12 weeks of normal training, either in a college, normal school, summer school, or in the professional department of a public high school. In order to encourage better-trained teachers, a minimum wage has been fixed by the legislature, as follows: (1) Any teacher holding a first-grade county certificate shall receive a daily wage of not less than 3 cents multiplied by the general average shown on the certificate. (2) Any teacher holding a second-grade county certificate shall receive not less than $2\frac{3}{4}$ cents multiplied by the general average shown on her certificate up to 85 per cent. (3) Any teacher holding a third-grade county certificate shall receive a daily wage of not less than $2\frac{1}{2}$ cents multiplied by the general average shown on her certificate.

Tennessee, with its facilities for training teachers, increased by the opening of the three State normal schools for white teachers and one for negro teachers, now requires that all certificates to teach shall be

granted by the State superintendent, and that candidates must be at least 18 years of age.

Summer schools.—One of the most important agencies in the improvement of teachers already in service is the summer school. In the summer of 1912 there were held in the United States 569 summer schools, with an enrollment of 142,217 students. The great majority of these students were in teachers' training courses, and were engaged either in the study of subjects which they were teaching, or expected to teach, or in professional work in education and methods. A large number were rural teachers. Many summer schools, especially those of State normal schools and State colleges of agriculture, are giving courses particularly for preparation for rural teaching. The Teachers' College of Columbia University conducts a special department of rural education, which has been during the past year under the direction of Dr. Ernest Burnham, director of the department of rural education of the State Normal School at Kalamazoo, Mich. Johns Hopkins University, at Baltimore, during the summer of 1913 conducted a department of rural education. The State Teachers' College, of Greeley, Colo., gave during the past summer a six weeks' course especially for rural teachers and for county superintendents.

Considerable attention to the question of training rural teachers has been given the past few years by the Conference for Education in the South. A section on the training and certification of teachers after careful study, recommended, at the meeting held in Richmond in April, 1913, that the Southern States make wider use of the high-school teacher-training department. The plan has been tried in high schools in three Southern States. Virginia has had such courses in 24 schools since 1908, and the plan has been successful. Arkansas introduced professional courses for preparation for teaching in 11 schools in September, 1911; North Carolina, in a few schools the same year. The section recommends that every Southern State enact legislation providing that certain strong country high schools be selected by the State department of education to give these courses in preparation for rural teaching under the management and control of the State department and supported in part from State funds. The recommendations relative to the conditions governing the courses are as follows:

It is the belief of the majority of the conference of high-school inspectors that if specific teacher training for rural teachers is to be undertaken by the high schools of the South it should be done somewhat under the following conditions:

First. It should be done in a distinct class, following the high-school course, and open to pupils of sufficient age and experience after the second year of high-school training.

Second. It should be under the immediate charge of an expert elementary teacher and the principal.

Third. The year's work should cover the subject matter of the rural school and the State syllabus.

Fourth. Observation and practice should be given in the grades and neighboring rural schools, with criticism, bringing in the principles of education, laws of psychology, methods and management in the doing, with supplementary texts.

Fifth. The high-school equipment in laboratories, vocational departments, library, or other equipment should be utilized fully as needed.

Sixth. Cooperation with the boys' and girls' clubs in agriculture and domestic science through the supervisors of these should be secured, developing capacity for outdoor life and outdoor studies.

Seventh. The State should appropriate additional funds or set aside from the present school funds at least $500 a school for a limited number of training classes in different sections of the State, the town and county together duplicating the State appropriation, and providing the necessary accommodations.

Eighth. These departments must be supervised by the State and meet definite requirements to receive the appropriation.

Ninth. Graduates of the training classes are to be given elementary certificates good for two years and renewable under certain conditions.

Tenth. Teachers in the field may attend the classes for any period of the year when not engaged in teaching and elect additional work in the high school.

THE ELIMINATION OF RURAL ILLITERACY.

Figures from the 1910 Census concerning the number of illiterates 10 years of age and over in the United States show that the rural rate of illiteracy is practically twice as great as the urban rate of illiteracy, the figures being 10.1 and 5.2 per cent, respectively. The rate of rural illiteracy is greater than the urban in 34 States and less in 14. In the 34 States the rural illiteracy is from one to three and a half times as great as the urban. The 14 States where the rural illiteracy is less than the urban illiteracy are the New England States and New York, New Jersey, Ohio, Illinois, Michigan, Iowa, Nebraska, and Kansas.

The higher rate of rural illiteracy is due in large measure to the lack of proper school facilities in the rural districts. The higher rate of rural illiteracy in the Southern States can not be laid to the negro population, because for the entire group of Southern States the rate of illiteracy among rural whites is three times the rate among urban whites, and the rate among rural whites is greater in every individual Southern State than among urban whites. The rate of illiteracy among rural negroes in the same States, while nearly seven times the rate for the rural whites, is only one and one-half times the rate of illiteracy among urban negroes.

These facts, brought out by the last Federal Census, have resulted in several movements for the elimination of at least a part of the rural illiteracy. These movements include special schools for adults and for boys and girls either too old or unable for any reason to attend regular school. Night schools have been common in cities in

all parts of the United States for many years. Rural night schools, however, are comparatively new and exist in only a few sections.

The extension service of the Massachusetts Agricultural College began in 1910 a movement to teach the illiterate immigrant farm hands, especially those employed on the tobacco and onion farms in the Connecticut Valley, to read and write. The work is done in cooperation with local school authorities, who give the use of the school building and furnish books and supplies. The college furnishes the teachers, who in all cases are volunteers from the student body and teach without pay. The schools are in session, as a rule, two nights during the week, as the student-teachers are required to keep up their regular college studies. The schools are necessarily within a radius of 10 or 15 miles from the college, so that they are easily accessible to the student-teachers. In four schools, attended by Polish pupils during the past year, nine teachers gave instruction. The average attendance was 80.

Another notable and successful experiment in rural night schools was in Rowan County, Ky. In September, 1911, night schools were opened in every rural school in the county, through the efforts and inspiration of Mrs. Cora Wilson Stewart, the county superintendent. About 1,200 persons, from 18 to 86 years of age, or nearly one-third of the total population of the county between those ages, attended the first year. Schools were in session the first four nights every week during the school year. The regular teachers gave their services for this extra work without additional pay. Reading, writing, arithmetic, and spelling were taught. The second year 1,600 persons were enrolled. The plan has been adopted by about 10 of the counties in Kentucky.[1]

The State superintendent of Tennessee inaugurated a campaign for the eradication of illiteracy immediately after the census figures became available. He asked his county superintendents to assist in this undertaking and suggested to them the plan followed by Mrs. Stewart in Kentucky. While more or less was done throughout the State, only two counties—Bradley in east Tennessee and Sumner in middle Tennessee—entered upon the task in real earnestness. In Bradley County during the past year approximately 20 night schools, composed exclusively of illiterate adults, were held. The attendance ranged from 4 to 23. The men and women taking the course were very enthusiastic and spoke in highest terms of benefits they received and of the consecration and zeal of their teachers.

In Sumner County about 30 special schools for illiterates were held during the year. Some of them were night schools; others met on Saturday afternoons; and some were held in connection with the regular Sunday schools. Church people and leading citizens came

[1] See Bulletin, 1913, No. 20: Illiteracy in the United States and an Experiment for its Elimination.

to the aid of the teachers, and the work was successful, not only in eliminating part of the illiteracy, but also in bringing the school into more favorable attention on the part of the community than ever before. During the past year a few special schools were held in Anderson County, and many other county superintendents have declared their intention of doing likewise during the next year.

An interesting experiment was made in Virginia during the past two years which has been successful and will undoubtedly be adopted in many other places. Irish Creek Hollow is in a mountain valley in Rockbridge County and is inhabited by mountaineers of original stock who have intermarried as much as the law permits. The valley is inaccessible and is sparsely settled. The homes are log cabins, whose chief fault lies in their cramped quarters. With plenty of woodland all around, log houses of sufficient size may be easily built. The need is not so much the means as the will to do better things. The community has had a school building for several years, but no school. After the building was erected it was used as a schoolhouse for only a very few years, because no teacher could be found who would endure the discomforts and isolation of the region. Three years ago the school board offered the place successively to 21 teachers in a desperate effort to do something for the community. Their efforts were unavailing. Then they adopted another plan.

In the summer of 1911 two of the best teachers of the county were induced by the school board and the county superintendent to go to this valley and establish a summer school upon closing their regular schools. Taking with them a 12-year-old boy as an assistant, they carried provisions, cooking utensils, and tents in which to live. School was opened in the old school building. The attendance far exceeded the expectations of the teachers, and a neighboring church was also used. There were approximately 80 children enrolled in morning classes and from 30 to 40 adults in the afternoon and evening classes. Among the children enrolled in the morning school all but six were beginners or in the first reader. The interest in the school on the part of the residents of the valley was very great. They built an additional schoolroom and two comfortable living rooms for the teachers. A church near by had been begun several years before, but was not completed until the establishment of the summer school, when it was completed and used both for religious services and as a schoolroom. Money was raised in the community, and an organ was purchased for the church, which was used for the school also.

The secretary of the Virginia Cooperative Education Association visited the school during the 1912 session and organized a school and civic league and an athletic association, both of which were open to all residents of the community. Practically all the people in the community of school age and over joined the civic league. Only

one person among the members had ever gone far enough in school to study common fractions.

At one session the teachers were accompanied by a theological student, who conducted religious services in the church and assisted in the social welfare work of the school. A Sunday-school class was organized and taught by the regular teachers. The result of the entire experiment after three years has been satisfactory. The credit for beginning the work belongs to the county superintendent and the school trustees.

The State department of public instruction of Virginia is making a survey of the mountain sections of Virginia at the present time and proposes to conduct many summer schools during the coming year like the one which has been held at Irish Creek Hollow.

PUPILS' READING CIRCLES.

In order to encourage wider and more general reading on the part of rural children, including those both in and out of school, in several States pupils' reading circles have been organized. As an example of this the Alabama reading circle may be described. In that State the pupils' reading circle is a part of the teachers' reading circle and was inaugurated as a result of the action of the State educational association in 1909. The work is under the direction of the board of directors who have the teachers' circle in charge. It is composed of six persons elected by the association and the State superintendent of public instruction. A law which became operative in March, 1912, provides State aid for libraries in rural, town, and village schools not located in towns of 1,000 population or more. The State contributes $10 to each school, providing the county and the local school district contribute $10 each, the $30 to be used for the purchase of a rural-school library. This money must be expended for books from an approved list prepared by the State superintendent of public instruction. Since the adoption of the law 754 libraries have been established.

The young people's course contemplates the use of the library so obtained. Teachers are encouraged to organize their schools into reading clubs. The State department has published a list containing nine complete sets of books, each containing books suited to the various grades. Each complete set costs $10. Each pupil in the reading circle is expected to read three books from those of his own grade. A certificate is granted to each one who does so. Kansas and Ohio have similar reading circles. Books may be obtained in Ohio from the State librarian for the use of the reading circles. They are shipped to reading circles in any part of the State without expense, except for express charges. In this way the rural children have good

books accessible at a very low cost, and the circles encourage them to read.

As examples of similar work, local, rather than State-wide in extent, the following instances may be mentioned:

The superintendent of schools of the township of Warren, Mass., to encourage pupils to read has arranged a list of 450 books in the public library suitable for the various grades. The grades are indicated for which each book is suited. The teachers in the schools located away from the public library assist the children in getting the books.

The county superintendent of Brown County, S. Dak., has secured 800 supplementary readers for grades 1 to 6, which are sent to rural teachers for the use of the children.

"Literary diplomas" are issued by the district superintendent of District No. 1, Montgomery County, N. Y., to every child in the supervisory district who reads 10 books during the year from a list compiled by the superintendent, commits to memory 6 poems required for the English work of the grade, and writes a letter to the district superintendent describing the book which he likes best.

SCHOOL FUNDS.

Some of the important changes in methods of raising and distributing State and county school funds are noted below:

One-third of the gross revenue of the State of Tennessee now constitutes the general education fund. Until the present year it was 25 per cent of the total revenue of the State. Ten per cent of the general education fund is now set aside for encouraging the introduction of industrial work, including agriculture, household sciences, and manual training in county elementary schools and for providing adequate supervision of the same. It may also be used for encouraging the establishment of consolidated schools, with transportation at public expense. No part of this money, however, may be used in a county whose levy is less than 40 cents on the $100 and which does not collect a $2 poll tax and all of the special taxes which the State laws permit. The State will pay to such counties one-half of the salary of a county industrial supervisor. Also it will pay part of the cost of maintenance of consolidated schools with three teachers or more.

South Carolina has provided for a 1-mill tax on all real and personal property, to be used for school purposes. This constitutes the State school fund. One-half of it is retained in the counties in which it is raised and may be used by the county boards of education for school purposes "in the discretion of the board." The other half is paid to the State treasurer and is used by him to cover warrants of the State board of education. The law provides that

$60,000 a year shall be used for high schools in the State, $60,000 for the extension of public schools, $20,000 for consolidated graded schools, $5,000 for rural libraries, and the remainder shall be used by the State board of education in lengthening school terms.

In order to increase the rural school term to a minimum of six months, North Carolina has provided a "State equalizing school fund." There is set aside annually 5 per cent of the annual tax levied and collected for State purposes on all real and personal property in the State. This will be distributed among the counties of the State which have complied with all of the requirements of a previous law providing a school term of four months in each school district It is to be disbursed so as to equalize the school terms in these counties and bring the term in each legal school district to a minimum of six months. The money may be used only for the salaries of teachers, and the amount paid from this fund shall not exceed $40 per month for any first-grade teacher, $30 for any second-grade teacher, and $20 for any third-grade teacher.

A movement is gaining headway in Louisiana to make the parish (county) the unit of taxation for the maintenance of public schools. At present the State distributes the State funds to the parishes on the basis of the school population. The State appropriation is the income from a $1\frac{3}{20}$-mill tax. The parishes must levy a 3-mill tax. Supplementary funds have been raised by local school-district taxes. Eleven parishes during the year have voted additional parish taxes for the purposes of maintenance, and will use the local district as a unit of taxation only for special purposes.

In West Virginia a new law makes the county superintendent the county financial secretary. It requires that all orders of whatever sort issued by the magisterial boards of education must be countersigned by the county superintendents before payments are made. This virtually makes the county the controlling unit in the administration of rural school affairs.

THE SOCIAL AND CIVIC CENTER MOVEMENT.

The various organizations mentioned in the following paragraphs, most of which meet at the schoolhouses, are all-important factors in making the rural school the social and civic center of the school district. Considerable agitation for the use of rural schoolhouses for such purposes is apparent in all parts of the United States. In Wisconsin especially the rural schoolhouse has come into use for public meetings very generally. This has been due in part to the work of the bureau of social and civic center development of the State University, but perhaps more directly to the work of the State department of education, whose representatives to the county school-board conventions during the past year made a special point of discussing

the wider use of the school plant. The department also has published a bulletin which it is putting into the hands of the rural school teachers and school trustees, containing suggestions for using the schoolhouse for public meetings.

The West Virginia State department of education has issued a similar publication. It was prepared especially for the use of teachers and contains 25 special programs which may be used in arranging community meetings at schoolhouses. The programs are for adults, not school children. They are on such subjects as local history, good roads, sanitation, etc.

There has been considerable activity in this social-center movement in the States of the Northwest, particularly in Washington, Oregon, and Idaho. One plan of creating rural community centers in Washington is worthy of note. In 1909 Walla Walla County was divided by the county superintendent into 12 groups or districts, with one of the larger schoolhouses at the center of each district. This school was made the community center as far as possible. The movement began by a series of contests in spelling and declamations. All the patrons in the group were invited to the meetings at the central school. Next the contests in spelling and declamations were supplemented by contests in sewing and cooking, and then by other programs, including lecture courses and discussions by local people on subjects of interest in the community. One outgrowth of the work has been a large number of school fairs held at the central schools in which the children from the surrounding schools took part. It has resulted also in uniting the school districts in spirit and sympathy, and will probably result in many cases in consolidating the smaller one-room schools with the central school.

In Newton County, Mo., three days are recognized as school community days: Parents' day, school day, and graduation day. On "parents' day" the people gather at the schoolhouse for a picnic and a general social gathering, and also to discuss educational affairs and things needed for the improvement of school. For educational purposes the county is divided into seven districts; each of these centers around a village, and it is here that the "school-day" exercises are held. The day's program includes a teachers' institute in the morning, followed by public contests in declamation and spelling and in athletics later in the day. Many exhibits are displayed of the work of the schools. A feature of the program is the school parade, in which the children in the various schools march. On "graduation day" the pupils finishing the work of the eighth grade gather at the county seat to receive their diplomas in the presence of a large gathering of parents and other interested persons.

SCHOOL FAIRS.

From all over the United States come reports of school fairs held in individual school districts, in township districts, and in county districts. In many cases they are institutions separate and distinct; in other cases they are departments of agricultural fairs. Virginia probably holds more school fairs separate from other gatherings than any other State. In that State the fairs are held with the county as the unit. There were during the past summer approximately 50 county school fairs in 50 counties out of the 100 in the State.

The movement in Virginia originated in 1907 with the Federation of Women's Clubs of the State. The superintendent of Campbell County took up the suggestion and held the first county school fair of the State at Rustburg, the county seat of Campbell County, on October 28, 1908. The event was not a large one, but it proved such a success that it was decided immediately to hold another the next year. The number of exhibits sent to the second fair was too large for the county courthouse and they were transferred to the largest building in town. In 1910, the third year, the fair was a greater success still. No building could be found large enough to hold the exhibits, and a tent was pitched upon the green in front of the courthouse. At the close of this fair a movement was started by the people of the county to provide a permanent school-fair hall. Funds were raised by contribution, by entertainments given in the schools, and by a supplemental appropriation by the county. A building was erected which was ready for use in 1911. It is a two-story building, 44 by 88½ feet. The lower story is an exhibit hall; the upper story an auditorium for public exercises. The total cost was $3,100. The county school board appropriated $1,000, the county board of supervisors $500, and $1,600 was raised in other ways.

The Campbell County school fair of 1911, the first held in the new building, was in keeping with the new quarters. In 1908, 24 prizes had been offered, with a total valuation of $70, while in 1911, 301 prizes were given, valued at $827. There were 1,529 pieces of work exhibited, all prepared by school children. They were divided among the various departments as follows: Literary, 340; agricultural, 114; floral, 105; domestic science, 587; domestic art, 226; manual training, 226; poultry, 45. In addition to these exhibits there were 150 entries in the spelling matches and 111 in athletic events. Four thousand persons attended. The next year was even a greater success. Prizes to the value of $1,200 were awarded, nearly 5,000 people attended, and 1,500 school children marched in the school parade.

Beginning with the Campbell County fair in 1908, the movement has spread throughout the State. In 1910 there were several suc-

cessful fairs. In 1911, 20 were held, in 1912, 44, and in 1913, approximately 50. A few of these were in connection with the county agricultural fairs, but most of them were held independently. They are held usually at the county seat and last one day only. People from all over the county, including the school children with their teachers, assemble by 9 or 10 o'clock in the morning. The first part of the day is spent in the hall examining the exhibits of the work of the school children. The exhibits include bread, biscuits, cakes, pies, butter, jellies, canned fruits, etc., all prepared by school girls; also shirt waists, aprons, handkerchiefs, and other articles as evidence of the value of the sewing taught in the schools. Another section contains exhibits of flowers, a third section the products of the agricultural clubs, and a fourth section, the manual-training exhibit, containing bookcases, writing tables, brooms, farm rakes, ax handles, shuck doormats, etc.

As a literary exhibit a large number of compositions are displayed on such subjects as good roads, the value of scientific methods of farming, how to make a country home comfortable and attractive, and the cause and prevention of consumption. In addition there are many specimens of writing and drawing, and of maps made by school children of their local communities, their county, and the State. Nothing is exhibited except the work of children.

Following the inspection of the exhibit are a few short addresses on topics of special interest, usually on some phase of education. Following this is an old-fashioned spelling match, in which pupils from every school compete. After lunch there comes the annual school-fair parade, in which the school children march, grouped by individual schools and school districts. Each school is led by its teachers; the pupils wear the school colors; many carry pennants, and in each group is a large banner bearing the name of the school. The parade is headed by a brass band and is reviewed by the county school board and other county officials. Following the parade are the athletic contests, in which children from the various schools take part. These include events for both boys and girls.

The county school fair has proved a valuable institution as a socializing agent and as a means of increasing educational sentiment throughout the county. It brings together large numbers of children from different schools, and their parents. They mingle together in a social way, becoming acquainted better than before. Through the exhibits and the general atmosphere of the meeting their interest in educational work is increased, and any movement for better schools meets with a heartier response as a result.

The State of Oregon has been particularly active during the past two years in the encouragement of school fairs. The 1911 legislature

authorized the State superintendent of public instruction to employ two assistants to supervise industrial work in the schools. These supervisors are affiliated with the State agricultural college and devote most of their time to agricultural activities. The fair movement is regarded in the State as important in the development of the public schools, as it tends to bring about a more practical education. It is a direct result of the introduction of agriculture and animal husbandry into the public schools. The fairs are known officially as "school children's industrial fairs." They are held either as independent institutions or in connection with agricultural fairs. In some counties local school fairs are held by six or eight adjacent school districts combining together for this purpose. The best materials from the local fairs are taken to the county agricultural fair and exhibited there. The best of the school exhibits at the county fairs are selected and exhibited at the State agricultural fair. Prizes are awarded in the local, county, and State fairs, amounting during the past year to approximately $20,000. The total number of children exhibiting was about 75,000, or nearly one-half of the school children of the State. The materials exhibited include garden products, flowers, work in cooking, preserving, sewing, manual training, poultry and hogs raised by pupils.

These two instances are sufficient to show the character of the work of the school fair. Reports received from the majority of States show that fairs, either local or county, have been held. The older States in the East have for many years devoted a part of the exhibit at the regular county agricultural fairs to an exhibition of work of the public schools and in many instances have designated one day of the fair as educational day.

COMMUNITY AND SCHOOL IMPROVEMENT ASSOCIATIONS.

It is becoming more generally recognized that school conditions depend upon both general economic and general social conditions. Communities that are poor financially or those of low moral standing may maintain good schools, but as a rule they do not. Rural-school improvement is a part of general rural-life improvement and comes or fails to come with a rural forward movement along all lines. This forward movement is coming most rapidly where country communities are organized for the betterment of themselves and the conditions under which they are living. It would seem that such organization is imperative. The individualistic life of the farmer of two generations ago no longer exists. The self-sufficing farm of former days remains only in very remote and sparsely settled regions. The farm of to-day is a commercial institution on which the energies of the farmer are given to one or two special products. These are

sold, not consumed by the family, and the money obtained is used to satisfy the family's needs.

The farmer has become a part of the community, and his individual progress depends upon the community progress. Formerly he was not a part of any community; later a part in educational and religious affairs only; now he is a part of a community in commercial affairs as well, and his progress in commercial affairs demands that he unite his interests with those of other people in the community, both farmers and tradesmen.

It is not enough that the rural population realize that they are a part of a community. They must appreciate that if progress in economic, social, and educational affairs is to take place, the communities must organize. Progress follows continued stimulation, and interest will be continued only when it is the business of some one or of some group to keep up the interest. A few illustrations will be given in the following pages of rural organizations, some of which have for their primary purpose the general community interests; others school improvement alone. As a rule, it is found that the associations, whether organized for community betterment or for school improvement, must concern themselves with the entire community. The school is a part of the community and as such must receive the consideration of the general improvement associations, and school-improvement associations can do little for the school without indirectly doing much for the community.

THE BENNINGTON COUNTY (VT.) IMPROVEMENT ASSOCIATION.

This association will serve as an example of a general improvement association organized with the county as the unit. It was organized in March, 1912, by over 100 prominent business men of the county, including men engaged in manufacturing, trading, and farming. It concerns itself with anything that is for the betterment of the county. It was formed to stimulate activities for economic, educational, social, and moral improvement, and to furnish leaders for such betterment work. It provides the machinery for putting into operation policies generally regarded as desirable which individuals or individual communities could not put into operation. The county was selected as a unit because of the inter-community aspect of the improvement work. The association is committed to the following principal lines of activities:

(1) Better and more profitable agriculture.
(2) Better roads, with a more efficient system of road administration.
(3) A more adequate system of public schools, which will lead the small isolated rural school to a higher plane of efficiency.
(4) The development of home industries.
(5) The improvement of sanitary and hygienic conditions.
(6) The promotion of adequate play and recreation facilities.

(7) The fostering of a more evenly distributed social life.
(8) The furtherance of all plans for civic betterment and county beautification.

An idea of the activities of the association may be obtained from a statement of the definite accomplishments in the first year and a half of its existence.

Agriculture.—A county farm agent was obtained through the cooperation of the United States Department of Agriculture and the Soil Fertility League of Chicago. This agent is furnished an automobile by the association. He has visited approximately 200 farms in the county, some of them several times. He has addressed 30 farmers' meetings and has secured the cooperation of 60 farmers in undertaking several forms of demonstration work. They are cultivating various crops under his direction. With the cooperation of the State college of agriculture, he is taking a farm financial-record survey for the purpose of obtaining data to determine what forms of farming pay best in that county.

Through his activities, the Bennington Farmers' League has been organized, and by the end of the year it is expected that a local association will be formed in every township. The purpose of the league and the local branches is to enable the farmer to buy and sell cooperatively. During the year over 100 farmers bought their fertilizers through the county league.

With the cooperation of the school superintendents and teachers, a beginning has been made in establishing boys' agricultural clubs in connection with the schools. Much work has also been done in seed testing in the schools, under directions furnished by the county farm agent.

Public roads.—A selectmen's and roadmasters' association was formed as one of the first activities of the county improvement association. An expert from the Federal Office of Good Roads was obtained, who spent in the county the summer and fall of 1912 and the entire season when road construction was possible in 1913. This agent assumed advisory charge of the construction and maintenance of certain selected roads in the several townships of the county, on which the work was paid for by the towns and the State. He had 21 split-log road drags built and demonstrated the effectiveness and economy of their use. His work is creating a desire for better roads and is demonstrating how good roads may be built and old roads made good and maintained at the lowest cost.

Schools.—The association was instrumental in forming two new school-supervisory unions, including three townships each, and in the establishment of a teacher-training course in an academy in the county. As a result of the services of the new union superintendents, better methods of teaching were adopted, teachers' meetings were held at which instruction was given in subjects pertaining to rural

teaching, courses of study were prepared and furnished to the teacher, and school children were reclassified to eliminate unnecessary classes. New equipment was obtained, buildings were repaired and painted both inside and outside, and school grounds were improved. In these two union districts, six schools were abandoned during the year, and the children were transported to other buildings. Three more will be closed in the present year. In one union graduation exercises were held for pupils who had completed the eighth grade.

The teacher-training course established was in the Burr and Burton Seminary and in its first year had 12 pupils, of whom 5 were in the senior class of the seminary and 7 had previously graduated. The seminary course is at least equivalent to that of the standard high school. The teacher-training course aims to fit the pupils for rural school work. It includes not only methods of teaching subjects usually included in the elementary school curriculum, but also something about the problems of rural life. Country schools in the county were used for observation and practice teaching.

District nursing.—A graduate nurse, employed by the county-improvement association, made a house-to-house survey of part of the county, covering economic, social, moral, religious, sanitary, and hygienic conditions. This gave valuable information regarding the needs of the county, particularly in relation to sanitation, the facilities for caring for the sick, the things necessary for the prevention of disease, and the sort of instruction in sanitation and hygiene needed in the public schools. The nurse took care of several cases of critical illness and did considerable social service work in improving conditions in many homes, in having certain children properly clothed and fed, and in other similar ways. A tuberculosis and educational motion-picture exhibit prepared by the State department of health was secured for the county by the district nurse, and 13 entertainments were given, which were attended by 2,500 people.

Affiliated organizations.—Local community-improvement associations were organized in every village, wherever possible. They have been very active in securing physical improvements, such as cement and stone sidewalks, electric lighting, village parks, playgrounds, clean streets, new school buildings, etc. Through these local associations, intervillage cooperation was made possible by the county improvement association in arranging for a county lyceum lecture and entertainment course. Advantageous rates were obtained and five numbers of high order were given at several different places in the county at a low rate for each course.

The Bennington County Improvement Association is financed by annual dues from its members, and by contributions from certain members who constitute the "roll of honor," and by others called "sustaining members." Nearly 600 regular members pay a fee of

$1 per year each. Ten sustaining members each contributed $100; one on the roll of honor gave $250, the nine others $1,000 each. In addition to the activities instituted and supported by the organization, the association employs a secretary to devote his entire time to the general management of the association's affairs and to direct a complete survey of economic, social, educational, and religious conditions of the county. A man has been employed who has had long experience in this sort of work.

MONTGOMERY COUNTY (MD.) COUNTRY LIFE COMMISSION.

An organization formed in Montgomery County, Md., in 1911, under the title of the "Montgomery County Country Life Commission," is in many ways similar to the Bennington County association. Its aim was to make Montgomery County "the model rural county of the United States," and it is concerned with anything that relates to the welfare of the county, particularly the educational, social, moral, and economic factors.

The principal work done by the commission has been a sociological survey of the county, through which facts are now available for a basis of the constructive work proposed by the association. The commission invited and secured the services of the department of church and country life of the Presbyterian Board of Home Missions in making the survey. This board had made similar surveys in other States and had trained investigators in its employ. The field work was done by two of them who spent four months in the county. They concerned themselves with general economic conditions, the character of the population, social welfare, recreation, social life, and educational and religious conditions and activities. In the educational survey, the investigators were assisted by the United States Bureau of Education. As complete information as possible was obtained concerning the physical conditions of the school grounds, buildings, equipment, etc.; the school enrollment, attendance, reasons for leaving school; the cost of the schools, their instructional work, the general educational training and experience of teachers; and the social work of the schools. The opinions of about 1,200 school patrons were obtained regarding the individual schools and the school system. The private schools of the county were included in the investigation.

The results of the general survey were published by the Presbyterian Board of Home Missions and copies are distributed free, upon request addressed to the New York City office of the board. The results of the educational survey have been published by the Bureau of Education and may be obtained upon application.[1]

[1] Bulletin of the Bureau of Education, 1913, No. 32: An Educational Survey of a Suburban and Rural County.

THE MARYLAND COUNTRY LIFE COMMISSION.

The existence of the Maryland county commission just mentioned is responsible in part at least for the introduction in the State legislature of a bill instructing the governor to appoint a State country life commission. This measure was passed by the general assembly in April, 1912, and the following persons were named by the governor as members of the commission: Henry J. Bowdoin, Robert Crain, Jerome A. Davis, E. E. Osborn, Edward Reindollar, W. Irving Walker.

No appropriation was made by the legislature, but the commission secured a small fund from private contributions and secured the services of an investigator who made a personal, but hasty, survey of the conditions surrounding rural life in Maryland. A report has been issued containing the results of this survey. It deals with such questions as "The rural population," "The agricultural wealth," "Rural education," including the State College of Agriculture, the State board of agriculture, labor on the farm, the grange, and the country church. It contains many recommendations of value.

PRESCOTT (WIS.) PEOPLE'S CLUB.

As an example of an improvement organization of a more local character than those already mentioned, the Prescott People's Club may be cited. Prescott is a town of less than 1,000 population, and is the trading center for a community of farmers. The People's Club is composed of men, women, and children from all occupations and professions. Its purpose is the betterment of the people of the town and the surrounding territory. It aims to create and maintain a friendly spirit between the village people and the neighboring farmers, to make the village attractive and the village and farm homes as beautiful as possible.

Its work is carried on through committees, each of which includes people from the village and from the farms. For instance, a social committee has charge of amusements and entertainments for old and young people. A legislative committee keeps in touch with the State legislation affecting the community or of particular interest to its people. A publicity committee has done much to advertise the town as a place of business and of residence and to advertise the surrounding country as desirable for farming. An improvement committee is in charge of the work of beautifying the unsightly places about the village by turning them into parks and gardens. Vacant lots have been cleaned up, billboards removed, filth and rubbish of all kinds disposed of, and trees, shrubs, and flowers have been planted.

The schoolhouse is the meeting place for the organization and also for entertainments furnished by the social committee, except when

the attendance requires the use of a larger hall. Bringing the people together in the schoolhouse in this way is resulting in an increased interest in school affairs and also in many improvements to the schoolhouse and school grounds. The village park has been converted into a public playground for the benefit of the school children; apparatus for play has been provided, and a trained instructor is employed.

The result of all of this work has been the development of a good community spirit among the townspeople and of cordial relations between them and the farmers surrounding the town. The feeling of antagonism and distrust so often found between villagers and farmers is wholly absent. The village people of Prescott and the farm people know that in these days of modern farming they are dependent upon each other. The association is bringing them together in social, religious, and educational affairs, greatly to the benefit of both.

AMENIA (N. Y.) FIELD DAY.

The village of Amenia, in Dutchess County, N. Y., has had, for the past four years, a "field-day organization," for the purpose of getting all of the people together for a common frolic—a playday in which everybody takes part and no one merely stands and looks on. It was started as an experiment in cooperative recreation, and is in part a substitute for the commercial fair. It is operated by the united efforts of the entire community, and people of the whole countryside are invited to join with the inhabitants of the village in a day of wholesome enjoyment, without the presence of fakers, liquors, side shows, and similar amusements found so often in places of community gatherings.

The fundamental ideas underlying the movement in the minds of the leaders are: (1) That the country will have to be made more attractive socially in order to keep the young folk on the farm; (2) that the farm boys and girls should not have so much regular work that they will forget how to play; (3) that boys and girls and men and women should not only be interested in honest and healthy sports, but they should take an active part in them; (4) that people who are interested and actively engaged in athletic sports are relieved of much of the temptation for strong drink and evil associations; and (5) that community progress will be forwarded by getting the people together for recreations in which all may take part.

The usual program contains athletic events for everyone in the morning and afternoon, with a short period in the afternoon for speechmaking. The evening is usually given over to a band concert.

The idea has become more popular with each succeeding year. A large number of people attend from the surrounding country as well as from the village. A community spirit has developed which

has brought about many improvements along all lines of local progress.

STATE AND COUNTY SCHOOL IMPROVEMENT ASSOCIATIONS.

Organizations for the improvement of schools, particularly rural schools, exist in many States under the name of school improvement associations or leagues. They are sometimes county and sometimes local organizations. In the Southern States, especially, many of them have been formed. In Mississippi, Louisiana, Kentucky, Tennessee, Arkansas, and Virginia, there are State organizers of school improvement associations employed in the State departments of education. In general, their work is that of assisting in organizing county associations and school district associations; furnishing suggestions and instructions for the association, both county and local, concerning the possibilities of their work; outlining suggestive programs for school improvement association meetings; and conducting through published bulletins, the newspapers of the State, and in any other way a publicity campaign for improved rural schools. That it is clearly regarded that school improvement must go hand in hand with general community improvement is evident from the work the associations are doing. The associations make the schoolhouse the gathering point for their general meetings, at which there are discussions of all phases of rural life. The Mississippi improvement associations in all parts of the State observe several special days, at which programs in keeping with the day are presented. In November a "public health day" is observed, and reports are made on the sanitary conditions of the community, and ways and means are discussed of freeing the neighborhood of disease. In December "library day" is observed. The desirability of rural libraries is discussed, and steps are taken to secure libraries for the school and community. In January "arbor day" is observed by planting trees on the school grounds and in the village parks, on the road sides, and about the homes. This is followed by a special meeting where reports are made relative to the plantings. In February "club day" is observed, at which the concerns of the boys' and girls' agricultural clubs are discussed by parents whose children have been enrolled in the clubs. In March a "field day" is held for the children of the school and the community, and all sorts of athletic sports are indulged.

The name of the organizations does not indicate the whole work. They exist for the purpose of helping to maintain an efficient school in a suitable building, but they also aim to make the school a social and civic center, and through this a means of helping the entire community. That they are community-improvement associations rather than school improvement associations alone is indicated in the name adopted in the State of Virginia. There they are called "school and civic leagues"; and the State department of education, in a

pamphlet of instructions to local organizers of leagues, says: "Let the schoolhouse be the rallying point and the school league the institution."

The Virginia school league is distinctively a social organization holding regular meetings in the school buildings for the discussion of special topics concerning community improvements, such as, "How farm women can secure some leisure for reading and recreation;" "Machinery and conveniences in the home, barn, and on the farm;" "The health of the home;" "Cooperation between school and home;" "Good roads;" and "Compulsory education." In addition, the league does general work for the benefit of the schools and assists in keeping the school building and grounds in condition, in securing supplies, apparatus, and equipment, and in raising money, in some instances, for increasing the salary of the teachers. However, popularizing education and the school through civic meetings in the schoolhouse is at least as important as any other result which is achieved.

One definite result of the school leagues in Virginia, apart from the creation of sentiment favoring education, is shown in the work in behalf of negro schools. Twenty-five counties of Virginia have industrial supervisors of negro schools. These supervisors, in addition to introducing industrial subjects into the curriculum, have organized, wherever possible, school improvement associations. The supervisors, with the assistance of the associations, have during the past year raised money to extend the term an average of one month each in 198 schools. New buildings (19) were erected at a cost of $24,000; 15 buildings were enlarged at a cost of $23,000; 46 were painted; 81 whitewashed; and 102 sanitary outhouses were built. There are approximately 425 school improvement leagues.

Alabama now has school improvement associations in every county. An indication of their activities for school betterment is the amount of money raised through them to supplement the regular school funds and expended for physical improvements. During the past year this amounted to approximately $100,000. The previous year they raised about $60,000.

Arkansas has nearly 400 active organizations, with approximately 20,000 members enrolled. In 1912, with only three-fourths of the number of associations, more than $40,000 was raised.

Reports from other States indicate that similar results are being obtained.

RURAL EDUCATION SURVEYS AND INVESTIGATIONS.

The work of the several county and State organizations for community and school improvement has been greatly handicapped by the lack of definite information concerning the conditions which they are

trying to remedy. In almost every instance where an effective organization has been formed, the need has been felt of a thorough study of the territory served by the organization. The Montgomery County (Md.) organization began by having made a thorough sociological survey of the county. The Bennington (Vt.) association did not do this at the beginning, but after an existence of a year and a half it is found that such a survey is necessary before thoroughly efficient work can be done. It is becoming generally recognized that the most effective work in school improvement must be based upon a complete knowledge of the exact status of the school, with definite data concerning the economic, social, and moral status of the community at large. This is the sort of information that rural education surveys and investigations bring out.

The Maryland educational survey, as mentioned in another paragraph, was made by field investigators of the country life department of the Presbyterian board of home missions, with the assistance of the Bureau of Education. This same organization has made similar county surveys in Pennsylvania, Ohio, Indiana, Illinois, Missouri, Kentucky, and Tennessee. Its survey work was begun to determine the status of the Presbyterian Church in the rural portions of the States studied. It was found necessary, however, to study the status of other churches at the same time, in order to compare the work of the Presbyterian Church with that of other denominations; and it was found necessary to study, as well, economic, educational, and social conditions, as all of these conditions affect the church, both directly and indirectly. Therefore the earlier surveys by the Presbyterian board of home missions were confined largely to church conditions, but their more recent surveys are general in scope and concern themselves with all phases of the lives of the people. The work has been done in each case by investigators who have spent considerable time in the territory studied and obtained data and information from all authentic sources possible.

Another notable series of county surveys has been made by the students in the State Normal School of Athens, Ga., under the direction of Mr. E. C. Branson, professor of rural sociology, through an organization known as the Georgia Club. The survey work is done as a practical feature of the course in rural sociology. The students are studying Georgia, as a whole, and county by county. They compare Georgia with other States and with herself a decade ago. Each county is studied in comparison with other counties and with itself at the last census. The inquiry is concerned with the people, agriculture, manufactures, wealth and taxation, public roads, cooperative enterprises, sanitation, the schools, and the church. Information is taken from census reports and from official State, county, and church records.

The results of the surveys are published and used in each county in county-improvement work by local affiliated members of the Georgia Club, composed of business and professional men occupying prominent places in their counties. The primary purpose of the survey, however, is for its educational value for the prospective rural-school teacher. It is coming to be generally believed that the teacher, in order to teach successfully, must know the conditions under which the pupils are living; and, in order to make the school serve in the fullest measure the community for which it exists, the teacher must know the economic and social conditions of that community. The survey, as made in the normal school, shows the young teacher how to get information relative to these conditions. The study of the facts brought out in the survey in the school inspires students with the desire to become as nearly as possible ideal teachers and encourages them to serve their communities outside of the school with intelligence based on a scientific study of the surrounding conditions.[1]

Several other institutions in the country are undertaking similar work. Since the work at Athens has become known, and particularly since the publication by the bureau of a bulletin outlining the organization of the Georgia Club, several colleges and normal schools are trying the plan.

Educational surveys similar to those made in Maryland and Georgia have been made and are making in many States throughout the Union. Progressive county superintendents are "taking inventory" by conducting surveys in their respective counties. Educational institutions are increasing the scope of their activities by studying the territory surrounding them. This is true particularly of State normal schools and of State colleges of agriculture. The agricultural colleges, of course, concern themselves especially with the agriculture of the territories studied, but they have also investigated educational facilities. The most notable of the agricultural college surveys was that made of several townships in Tompkins County by Dr. G. F. Warren, of New York State College of Agriculture. This was an agricultural survey, but much valuable information was obtained concerning the education of farmers, and particularly concerning the value of education in increasing their earning capacity as farmers. The Massachusetts Agricultural College, through its department of social science, is making similar studies.

THE WISCONSIN SURVEY.

Several studies have been made recently of the rural schools of entire States by certain State commissions with a view to obtaining information for use in revising school laws so that a more rapid improvement of the rural schools might follow. The "North Da-

[1] See Bureau of Education Bulletin, 1913, No. 23: The Georgia Club.

kota Rural School Commission," the "Better Iowa Schools Commission," and the "Wisconsin Committee of Fifteen" may be cited as examples of such commissions. The studies made by these three, and by the majority of similar committees, were general in character. None of these commissions made a detailed inquiry into the management of individual schools, nor of their instructional work. During the past year, however, an investigation was made in Wisconsin under the auspices of the Wisconsin State board of public affairs, which did go into the details of management and of the instruction given in the rural schools. The board secured the cooperation of the Training School for Public Service, an institution affiliated with the New York Bureau of Municipal Research. The study was conducted for the purpose of obtaining facts and information for constructive legislation for the improvement of the rural schools. The investigation was made with the cooperation of the State superintendent of public instruction and of the county superintendents. It was concerned with the following points:

(1) The business management of the schools.
(2) The sanitary and physical conditions.
(3) The qualifications of the teachers.
(4) The character and the conduct of the instruction.
(5) The quantity and quality of county and State supervision.

A general examination was made of school conditions in 27 widely distributed counties and a detailed investigation of 131 schools in 13 counties. A report was issued giving the findings of the study. It includes recommendations suggested to remedy some of the conditions which were found to be unsatisfactory. The report of the investigation has created much interest, not only in Wisconsin, but in other States, because of the findings of the investigators. School authorities and others realize that the unsatisfactory conditions brought to light in Wisconsin are not confined to that State alone, but probably prevail in other States where the organization for rural school management and supervision is similar to that existing in Wisconsin at the time of the investigation. That is the "single district" organization, in which practically each separate school has a local board of trustees in full control of the school and its affairs. More than one-half of the States in the United States are organized on this basis.

The field study in Wisconsin shows, in general:

(1) That the business management of the rural school is uneconomical and often unintelligent.

(2) That the financial accounts of the schools are very often not accurate, and in several instances show irregularities which suggest dishonesty on the part of school treasurers or boards of trustees.

(3) That school buildings, grounds, and equipment are unsuited to school purposes, unattractive, and often unsanitary.

(4) That school trustees have no "standard" by which to judge the prospective teacher whom they are about to engage.

(5) That few professionally trained teachers are employed in rural schools, and methods of teaching are crude.

(6) That there is practically no supervision on the part of the county superintendents.

The findings were a surprise to the great majority of the people in the State—even to those who considered themselves somewhat familiar with rural education. It resulted in the introduction of many bills in the legislature to remedy the unsatisfactory conditions found.

The most important measure passed by the legislature is one providing for a county board of education in every county in the State. This board is to be a continuing board of five members, one elected each year for a term of five years. The county superintendent is elected, as formerly, by the people, but his salary is fixed by the county board. The county board is empowered to appoint one assistant superintendent from a list of three persons submitted by the county superintendent, in all cases where there are more than 100 schools in the county, not including those in the city school districts. The county board may also appoint a clerk to assist the superintendent in his office work. Further powers given to the board include the authority to organize, alter, or consolidate school districts, to appoint a board to examine pupils for common-school diplomas, and to require of the county superintendent such reports as it may desire. It also is given the full management of the county training schools for rural teachers.

THE OHIO INVESTIGATION.

An investigation was made in Ohio, in the summer and fall of 1912, which was similar to the Wisconsin investigation. It was called the Ohio Rural Life Survey, and was conducted by an organization composed of representatives of 40 Ohio educational institutions. The field work was done under the direction of the department of church and country life of the Presbyterian board of home missions. The survey covered 21 counties. Over 60 men were engaged in the investigation. The inquiry was concerned with all phases of rural life, particularly economic, social, recreational, religious, and educational. The results were given wide publicity through the press and country life institutes. An appreciation of the condition of affairs in the rural schools was created in the State among the leaders in public affairs, and the result was the introduction into the legislature of several measures proposing to remedy conditions. As a substitute, however, for the proposed measures, the legislature provided, upon the recommendation of the governor, a special commission to make

a more detailed study than had already been made by the Ohio Rural Life Survey.[1]

Common schools, normal schools, and agricultural schools are included in its scope.

In accordance with the provisions of the act of the legislature, the governor selected a commission of three members, Miss Edith Campbell, William L. Allendorf, and O. J. Thatcher. These persons served without pay, but were provided with a State appropriation of $10,000 to employ a secretary and investigator, and to pay in part the expenses of the survey. To this amount was added a much larger sum provided by the Training School for Public Service of the New York Bureau of Municipal Research. Also Mr. Horace L. Brittain of the training school was secured as secretary of the commission and director of the survey.

The inadequacy of the appropriation made it necessary to use volunteer workers in the field. These included 1 dean of a college, 2 deans of normal schools, 18 professors in normal schools and colleges of education (including 5 critic teachers), 59 senior students of education, all but 1 of whom had had experience in rural-school teaching varying from 1 to 18 years, and 3 members of the legislature, 1 of whom was a member of the survey commission. The field workers spent an aggregate of 340 days in the field and inspected 340 one-room rural schools. Each worker spent at least one day in each school inspected, no matter how small; in most cases at least eight hours were spent in the school, in interviewing teachers and school patrons, in making the tests and filling out reports.

In addition to field work of this nature, a study of the business procedure of boards of education was made, and an investigation was made of the management of school lands. Other material was obtained by a study of records already in existence, by a questionnaire sent to 25,000 teachers, by 2 questionnaires each to 88 county auditors, and by three questionnaires each to 419 superintendents of schools.

As the work of the survey neared completion the governor of the State issued a proclamation suggesting that Friday, November 14, be observed as *School Survey Day* and that a meeting be held in every schoolhouse in the State on the afternoon or evening of that day. More than 6,000 such meetings were held. A pamphlet issued by the State department of public instruction sent to each school contained a suggestive program for the evening. It contained also the governor's proclamation, a brief history of education in Ohio, and a statement relating to the survey. These three subjects were discussed at the meetings, and delegates were appointed to a State educational congress called by the governor and held at Columbus

[1] Act approved Mar. 11, 1913.

on December 5 and 6. At this meeting a preliminary report of the commission was given, and tentative suggestions were made for the improvement of the unsatisfactory conditions brought to light by the survey. A digest of these suggestions, prepared by the State superintendent of public instruction, is presented below:

Digest of the Constructive Suggestions of the Ohio State School Survey Commission.

The constructive suggestions with regard to the supervision of rural and village schools will call for compulsory supervision along the same general lines as have been in existence for many years, in cities with only such modifications as are made necessary by rural conditions. As in the case of cities, the rural communities will have absolute charge of the supervision of their own schools and the home-rule principle for the rural and village districts has been maintained entirely intact.

The following are the chief features of the plan:

1. A county board of education elected at large on a nonpartisan ballot by all voters of the county outside of cities, which already have full time supervision. This will not disturb the local boards of education in any sense, but will leave them in full control of their own schools.

2. A county superintendent of schools elected by the county board of education entirely without outside dictation. This county superintendent shall be a professional man and may be selected from any part of the State. The State shall pay half the salary of the county superintendent up to a maximum payment by the State of $1,000.

3. Division of the county into supervision districts by the county board of education, these supervision districts to be made up of rural and village school districts according to the number of teachers employed. The minimum number of teachers per district superintendent shall be 20 and the maximum 80. In case any township or village district or union of school districts for supervision purposes is already employing a superintendent who gives his full time to the work, even if the number of teachers employed fall below 20, the county board of education, on application from such district or union of districts, shall erect the district or union of districts into a supervision district on the following conditions: (*a*) That the superintendent continue to give his full time to supervision; (*b*) that instead of receiving full county aid the supervision district constituted as above shall receive a pro rata amount determined by the ratio of the number of teachers actually employed to 40—a proposed average number of teachers per superintendent as a basis.

4. The election of the district superintendent—(*a*) By the board of education in case there be but one school district in the supervision district; (*b*) by a joint meeting of the boards of education in districts where there are either two or three school districts in the supervision district; (*c*) by the presidents of the various boards of education in all supervision districts which contain more than three school districts.

5. The nomination, but not appointment, of the district superintendent by the county superintendent, the boards or presidents of boards, as the case may be, having the power to elect over this nomination on a three-fourths vote as in the city.

6. That local boards of education remain exactly as at present, with the right to elect the teacher on the nomination of the district superintendent and with the right to elect over his nomination by a three-fourth vote, as is the case in the cities.

7. The protection of all efficient supervisors now in the service by a provision in the law that three years' successful experience in supervision places a man automatically on the eligible list.

8. The payment of half the salary of each district superintendent by the county up to a maximum payment by the county of $750.

9. The requirement of professional training of superintendents not now in service by a provision which will enable young men to enter the profession if they have had

three years' successful teaching experience, and if they are willing to take a one-year graduate or senior course in the principles of school administration and supervision—such course to be taken in some reputable professional school.

It will be seen at the first glance that this plan of supervision maintains the rights of local communities, thus preserving to the schools the wonderful value of local loyalty while at the same time providing professional supervision for every school building in the State, large or small. This plan of supervision makes entirely impossible the least degree of State centralization.

Training of rural teachers.

The commission proposes—

1. That from one to three rural and small village high schools in each county shall be subsidized by the State to establish one-year training course for rural teachers with the certainty that the only way of properly preparing rural teachers is under rural conditions and that the only way of effectively keeping rural teachers is to keep them in sympathy with rural conditions throughout their school course.

2. The establishment of more summer courses for the training of teachers and the enlargement of those courses already existing.

3. The very gradual increase of the professional requirements of teachers so that there will be no undersupply of teachers from year to year, until by the year 1920 every teacher in Ohio who has entered the profession since 1913 will have had the equivalent of one year's professional training.

4. The revision of the examination system by which the 58 varieties of teachers' certificates now in existence will be reduced to 32 and by which one-half of each examination will consist of a practical test in classroom instruction, so that it will no longer be possible for a boy or girl of 18 successfully to cram up for examination and get a teacher's certificate no matter how unfit he or she may be for work in a schoolroom; and so that a young man or woman who shows the ability actually to instruct can not be deprived of a teacher's certificate simply because he or she is not a mind reader and can not guess what is in the heads of the examiners.

Continuation of survey work.

The commission believes that the survey as a survey must close its work by the 1st of January, but it also believes that there must be some provision made for the actual working out of details and follow-up-work in getting the legislation to be passed in January and February into actual operation. In place of a temporary survey it is proposed to form an efficiency organization in the State, made up of a director in the office of the State superintendent of public instruction and a department of survey in each normal college and normal school in the State so that with hardly any expense to the State men already in its service and who have already participated in this survey shall continue the work not for one year nor for two years, but as long as progress in education is necessary in the State of Ohio. This plan of calling in already existing institutions to do the work of survey is not only economical, but it will bring these various institutions more closely into touch with their constituencies and will give the students at these institutions a clearer practical knowledge of what efficiency in school work means.

In fine, this plan provides at a nominal cost for a continuous survey which shall be always up to date.[1]

[1] Since this section was placed in type the Ohio State Legislature has met in special session and adopted a new school code. Many of the recommendations of the commission were adopted as offered; others were adopted with minor changes.

THE VERMONT SURVEY.

Previous to the establishment of the Ohio commission, Vermont had provided, by an act of the legislature, a commission to investigate the educational system of the State. This commission was appointed by the governor and is also more than a rural school commission. It is instructed to inquire into the work of the colleges of the State, and also to recommend such reorganization of the public elementary and secondary schools and of the entire educational system of the State as "in their judgment will promote the ends of unity, harmony, economy, and efficiency." The commission has secured the cooperation of the Carnegie Foundation for the Advancement of Teaching in making the investigation.

Three experts were placed in the field by the Foundation and a thorough study of the educational system of the State made. The recommendations affecting directly rural education are as follows:

1. The recognition by the State of the reorganization of elementary and secondary education, including vocational training, as its immediate and supreme duty.

2. The organization of the office of a commissioner of education upon a basis competent to furnish expert supervision for the public school system. This involves a small lay board serving without salary, and salaries for educational experts of a character to secure the ablest men and women.

3. The problem of revision of the course of study, the establishment of agencies for training teachers, and other administrative details to be worked out by this board and its experts.

4. The State Agricultural College to receive a larger proportion of the generous annual appropriation of the State from the Federal Government and to be developed along lines calculated to make a fruitful connection between the agricultural college and the industries of farming, dairying, gardening, stock and poultry raising, and fruit culture.

The recommendations in detail have been published by the Foundation in its report on the investigation, entitled "Education in Vermont."

CHAPTER IX.

PROGRESS OF AGRICULTURAL EDUCATION IN 1912–13.

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Chief Specialist in Agricultural Education, Office of Experiment Stations, Department of Agriculture.

CONTENTS.—Introductory statement—Agricultural colleges—Secondary schools—Elementary schools—Teachers' training courses—The summer graduate school of agriculture—Educational work of the Department of Agriculture—Occurrences in other lands—Agricultural education in educational conventions—Agricultural education at other conventions.

INTRODUCTORY STATEMENT.

During the past year discussions concerning agricultural education have been as to what and how to teach in the elementary schools, the secondary schools, and the colleges, rather than concerning the need of such education. Both educators and laymen are coming to a more definite understanding of the whole movement.

The similarity in definition of terms, as adopted recently by the Legislatures of Massachusetts, Indiana, and New Jersey, is very marked. There is yet wide difference in opinions as to the organizations, methods, and terminology, but the tendency is strongly toward uniformity.

In general usage the term "agriculture" includes all forms of farming, horticulture, forestry, and animal husbandry. As applied to the public schools, it indicates a study of the elementary principles of the science of agriculture and a training in the art of agriculture. In the lower grades it takes the form of school gardening and that portion of nature study which deals with plants and with soils, insects, birds, and weather, in their relation to plant growth and development. The chief aim of agricultural instruction in the primary grades is neither scientific nor commercial; it is designed rather to interest the child in the general field of agriculture, to develop a love for plants and animals, to enable him to see and to appreciate the beauties of nature—in other words, to foster a healthy attitude

[1] Resigned Sept. 1, 1913, to accept chair of agricultural education in University of Vermont and State Agricultural College.

toward country life. In the upper grades and in the high school it becomes, to a limited degree, both commercial and scientific, but in all cases it must be primarily educational, to remain a permanent part of the public-school curriculum.

AGRICULTURAL COLLEGES.

The increase in the number of students in the agricultural colleges was greater in 1912–13 than ever before, and the increase was well distributed throughout the United States. A large part of this increase is due to the demand for teachers of agriculture and for county demonstration agents.

Kansas State Agricultural College has established a secondary school of agriculture in connection with the college, which will be used as a model school in the teacher's training courses.

At the University of Vermont and State Agricultural College a department of extension has been established in accordance with an act of the legislature of 1913, which appropriated $8,000 for the biennium for that purpose. A department of agricultural education has also been established, and a course in the teaching of agriculture is offered in 1913–14 to senior students of the agricultural college who expect to teach. It is planned to establish a 4-year teacher's training course, with secondary practice schools.

In Indiana a State supervisor of agricultural education has been appointed and departments of agriculture are to be established in a number of high schools in the State under the direction of the supervisor. All this is in accordance with the conditions named in the vocational education bill passed by the last legislature, which authorized State aid to all departments and special schools conforming to the rules and regulations of the State board of education.

In New Jersey, by an act of the legislature in 1913—

> the State will give money for the equipment and maintenance of approved vocational schools on a dollar-for-dollar basis in proportion to the amount spent by the local community out of funds raised by local taxation to the amount of $10,000 annually.[1]

The following rules and regulations, adopted by the State board of education, apply to agricultural schools:

1. Advisory committee must be appointed.
2. A separate vocational school must be in a separate building and have a separate organization of curricula, equipment, pupils, and teachers.
3. A vocational department of another school must have a separate organization of curricula, pupils, and teachers, as far as the vocational work is concerned.
4. The State board of education will not approve for any district State aid for more than $10,000 unless the applications from all the districts amount to less than $80,000.

[1] State of New Jersey, Dept. Pub. Instr., Bull. No. 1, June, 1913.

5. To receive State aid in any given year, application must be made before January 1.

6. In an all-day vocational school (*a*) not less than one-half of the time must be given to shop or farm work; * * * (*c*) instruction must tend to become individual; * * * (*f*) the school day must not be less than six nor more than seven hours in length; (*g*) the agricultural vocational school must have its courses arranged as a series of projects.

7. The part-time class must give instruction of direct value to the pupil for the work in which he is engaged.

8. To secure approval, the part-time or continuation work must (*a*) deal with a specific group of workers; (*b*) add to the technical knowledge and mechanical skill of the workers; (*c*) provide efficient instruction; (*d*) provide adequate amount of time.

9. An evening industrial or agricultural or household arts school must give short unit courses.

10. All vocational schools must provide for (*a*) shop or farm or household experience; (*b*) instruction in related subjects; (*c*) instruction in academic subjects.

11. Schools must be convenient of location and access.

12. Schools must have an adequate general and mechanical equipment.

13. Tuition may be paid by a district sending pupils to vocational schools and be reimbursed to the amount of $25 per annum for each pupil.

14. Districts may transport pupils either within the district or to other districts and be reimbursed by the State for 75 per cent of the amount expended.

A limited agricultural vocational certificate may be issued to an applicant to teach agriculture in a State-aided vocational school, provided the applicant presents evidence (*a*) that he has had adequate and successful farm experience; (*b*) that he is a graduate of an approved agricultural college; (*c*) that he is at least 21 years old; (*d*) that he has filed testimonials as to moral character and a physician's certificate of health. In lieu of (*b*) the State board of examiners will accept evidence of an academic training of at least two years beyond the usual four-year high-school course in an approved college or normal school or the equivalent thereof and at least four "short courses" in an approved agricultural college.

The limited certificate is valid for one year, at the end of which it may be renewed for two years upon the recommendations of both the superintendent of schools having jurisdiction and the commissioner of education. A limited agricultural vocational certificate may be made permanent after three years of successful teaching upon the recommendations of both the superintendent of schools having jurisdiction and the commissioner of education. An agricultural vocational certificate shall entitle the holder to teach agriculture and the allied academic subjects in a State-aided vocational school.

Certificates are required of all teachers and supervisors of vocational subjects in State-aided vocational schools.

SECONDARY SCHOOLS.

According to the most reliable information obtainable, there were about 2,300 high schools in the United States teaching agriculture in 1912–13. This indicates an increase of about 300 over the previous year. This number includes 47 State agricultural schools, 40 district agricultural schools, 67 county agricultural schools, 18 agricultural

departments of high schools, and the remaining 2,128 ordinary schools giving courses in agriculture.

One hundred and three normal schools reported courses in agriculture. Several special agricultural schools authorized by acts of legislature have not yet been organized.

The growth in the number of secondary schools teaching agriculture, while not as great as in some former years, was undoubtedly a more normal growth, and as great as the available supply of teachers qualified for the work would warrant.

ELEMENTARY SCHOOLS.

The greatest activity along the lines of agricultural instruction in the elementary schools is that of the boys' and girls' club work, which had a remarkable growth during the past year. The correlation of this work and the agricultural nature study with the regular work of the school has added very materially to the value of the curricula. Data are not available for a report of the number of elementary schools attempting to teach agriculture, but it is safe to say that the tendency is toward improvement in the quality of teaching in other subjects and toward adapting them to the home life of the child rather than the wholesale introduction of agriculture into schools taught by teachers ill prepared for the work either by experience, training, or temperament.

Agriculture is more and more coming to be considered a fit subject of study for the elementary school, but at the same time the need of trained teachers is widely recognized as a serious hindrance.

TEACHERS' TRAINING COURSES.

Forty of the land-grant institutions offered, during the past year, special work for the preparation of teachers of agriculture; 15 offer courses for teachers covering 4 years; 2 offer 2-year courses; and 3 give 1-year courses. Thirty-one of these institutions reported summer schools, and 20 gave summer courses in agricultural pedagogy. Four institutions also offered a course for college graduates who expect to teach agriculture.

A great many institutions besides land-grant colleges offer agriculture in summer courses. Summer schools teaching agriculture in 1913 were reported to the Bureau of Education as follows: Alabama, 6; Arkansas, 3; California, 3; Colorado, 1; Connecticut, 1; Delaware, 2; Florida, 1; Georgia, 1; Idaho, 3; Illinois, 2; Indiana, 4; Iowa, 2; Kansas, 1; Kentucky, 2; Louisiana, 3; Maine, 2; Massachusetts, 2; Michigan, 3; Minnesota, 6; Mississippi, 3; Missouri, 3; Nebraska, 3; New Hampshire, 1; New Jersey, 2; New Mexico, 1; New York, 3;

North Carolina, 2; North Dakota, 2; Ohio, 11; Oklahoma, 3; Oregon, 2; Pennsylvania, 2; South Carolina, 1; South Dakota, 1; Tennessee, 3; Texas, 3; Utah, 3; Virginia, 8; Washington, 2; West Virginia, 2; Wisconsin, 1.

THE SUMMER GRADUATE SCHOOL OF AGRICULTURE.

The fifth session of the graduate school of agriculture was held at the Michigan Agricultural College, East Lansing, Mich., July 1–26, 1913. As heretofore, the school was under the general management of the Association of American Agricultural Colleges and Experiment Stations, through its standing committee on graduate study. The financial support of the school was derived from the contributions of many of the colleges represented in the association, the matriculation fees of the students, and the funds of the Michigan Agricultural College. This institution, through its president and trustees, generously assumed responsibility for the maintenance of the school.

Courses of study were offered in the following lines: Soils and plant physiology, animal physiology, agronomy, horticulture, beef and dairy cattle, swine and poultry, rural engineering and rural economics, including farm management. As at previous sessions, the hours were so arranged that all interested in plants could attend the course in soils and plant physiology, and those interested in animals could attend the course in animal physiology. Both courses dealt more particularly with fundamental topics considered from the standpoint of both pure and applied science. The other courses were so arranged that the students naturally divided into smaller groups along the lines of their special interests.

The faculty numbered 48, and, in addition, there were 6 speakers at special conferences on general questions relating to agricultural education and research.

The total enrollment of students was 180, including 41 women, who were also enrolled in the graduate school of home economics. This latter school was under the general management of the American Home Economics Association, and for the first time prolonged its session to cover four weeks. As heretofore, it was conducted in close affiliation with the graduate school of agriculture. The students in the schools came from 34 States, and Porto Rico, Canada, Russia, China, and Japan.

Dean True, of the graduate school of agriculture, gave a brief summary of the history of the school during the decade of its existence, and pointed out in a general way the development of American agriculture and agricultural education and research during that

period. The substance of his remarks on the latter topic were as follows:

The main objects of the school have been to arouse interest in graduate study and to stimulate a keener sense of the needs and requirements of such work by bringing graduate students for a brief time under the direct influence and inspiration of leading teachers and investigators in different branches of agricultural and related sciences. There can be no doubt that this school has exerted considerable influence in promoting the establishment of graduate courses in agriculture in a number of institutions. It is also believed that it has done much toward creating more favorable conditions for serious study and research along agricultural lines in our whole system of agricultural colleges and experiment stations. And through its conferences on pedagogical and other questions relating to the broader aspects of agricultural education it has aided in the wider diffusion of agricultural knowledge through the lower schools and extension agencies.

In the decade during which the graduate school of agriculture has been in operation the movement for agricultural education in the United States has been greatly broadened and strengthened. Comparing very briefly the statistics of 1901 with those of 1911 (the latest available), we may get some indication of the growth of our agricultural institutions during this period. The permanent funds and equipment of the land-grant colleges have increased from $67,000,000 to $120,000,000, and their income from $7,000,000 to $22,000,000. The total number of students has increased from 42,000 to 84,000, and of agricultural students from 7,000 to 16,000.

In 1901, 2,000 farmers' institutes were held in the United States, with an attendance of 500,000; in 1911 there were 6,000 institutes, with an attendance of 2,500,000, to which may be added 1,000,000 persons who attended the lectures given in connection with special railroad trains and other forms of extension work.

Meanwhile there has been a remarkably rapid introduction of agriculture into the secondary schools. Within the past two years the number of institutions of secondary grade giving courses in agriculture has risen from 700 to 2,300.

Within the past 10 years experimental and research work in agricultural lines has also greatly increased. In 1901 the experiment stations had an income of $1,232,000, as compared with $3,615,000 in 1911, and the membership of their staffs increased from 688 to 1,587. In the middle of this period the Adams Act was passed, which has already done very much to set in operation higher researches on agricultural problems.

It is interesting to note the increase in some lines of research—the number of chemists increasing from 146 to 293, botanists from 49 to 84, mycologists and bacteriologists from 21 to 60, entomologists from 48 to 108, horticulturists from 78 to 131, animal husbandmen from 14 to 101, and dairymen from 31 to 77. Great advance in specialization is also shown in the following, who did not appear at all in the 1901 statistics of the stations, but were given in 1911: Agronomists, 139; plant breeders, 12; soil specialists, 34; plant pathologists, 54; foresters, 22; poultrymen, 32; and agricultural engineers, 21.

Meanwhile the financial interests involved in American agriculture have grown enormously. Land values have more than doubled, and aggregate nearly thirty billions of dollars; total values of farm property have also doubled, and aggregate over forty billions of dollars. The total value of the agricultural products of the United States for the 12 years ending in 1910 was seventy-nine billions of dollars.

The number of our farms has increased only 10.5 per cent, but they aggregate 6,340,000; the farm population has increased very slowly, but there are 30,000,000 people on our farms.

We are just awakening to the vast significance of the human and material problems involved in the development of our agriculture. Attention is just now focused on the rapid spread of the movement for popular education in agriculture. But those who stand closest to this great movement, and realize most fully what it means, know also that there never was a time when wise leadership and sound and deep knowledge in agricultural matters were so much to be desired as to-day. The period of propaganda to convince the rural people of the desirability of agricultural education and research is nearly over. What is especially needed now is wise and well-educated leadership, in order that the great movements under way may be efficiently organized and guided in right channels. Thoroughly trained investigators, teachers, and administrators are needed in constantly increasing numbers, and the supply is far below the demand.

EDUCATIONAL WORK OF THE DEPARTMENT OF AGRICULTURE.

The educational work of the department has been continued along the same general lines, but has grown considerably in extent. As in former years, the Office of Experiment Stations has represented the department in its relations with educational agencies, but several of the other bureaus and divisions have continued educational work closely related to their respective lines of investigation.

At the close of the cropping season of 1912, the Office of Farm Management of the Bureau of Plant Industry had a total enrollment of 22,000 boys and girls in the Northern, Central, and Western States. At the close of the fiscal year ended June 30, 1913, the same office had a total enrollment of 60,000, about 25,000 of these being handled directly from the Office of Farm Management. The remainder were handled through the State leaders and through the extension departments of the colleges of agriculture.

The following club activities have been systematically organized and promoted during the fiscal year: Boys' corn clubs on the acre basis, girls' garden and canning clubs based upon one-tenth of an acre of tomatoes and the canning of the surplus products, potato clubs, vacation canning and marketing clubs, sugar-beet clubs, poultry clubs, vegetable-garden clubs, and good-roads clubs.

A club of 1,000 members, consisting of 500 boys and their fathers, constitute the father-son club in the State of Kentucky for the present cropping season. This is a special effort to demonstrate the possibilities of teamwork in the home and upon the farm by enrolling the father and son in the same club and requiring the father to take 10 acres of corn in cooperation with the boy and his 1 acre, and follow the same instructions. The champion team records (father-son combination) of Kentucky are as follows: Edward C. Gallrein, of Jefferson County, grew 146 bushels and 36 pounds of Johnson County

corn on his acre. The average cost per bushel was 14 cents, and the net profit on his acre was $67.32. His father, Herman Gallrein, grew the same kind of corn and followed the same corn club instructions on 10 acres adjoining the boy's acre, and made an average yield of 139 bushels and 43 pounds per acre, at an average cost of 10 cents per bushel, showing a net profit per acre of $69.91.

Wherever the garden and canning club interests are promoted, an effort is made always to interest the mother with the daughter in the canning activities. At one course of instruction in Colorado in the interest of garden and canning club work, 380 women were present, to take the instruction with the girls.

During the winter months, in connection with the public schools of several States, special seed-testing campaigns were inaugurated, and some liberal premiums were awarded to the rural schools whose pupils would test the largest number of seed-corn ears for the farmers of the school district. In many school districts all the seed corn is tested by the children, and tabulated results of the tests were furnished to farmers and local papers. It may be said in this connection that a seed-corn label is used exclusively in corn-club work for marking hand-selected seed.

In the boys' corn clubs of the Southern States 91,196 boys each planted an acre of corn in 1913. The Office of Farmers' Cooperative Demonstration Work of the Bureau of Plant Industry, with whom these boys are enrolled, is now making a systematic campaign throughout the whole South to show the corn-club boys the importance of legumes and winter cover crops. In this new work the boys will learn the fundamental principles of proper crop rotation.

In the girls' canning clubs there are 33,060 members distributed over 12 Southern States. Each one of these girls had a garden of one-tenth of an acre of tomatoes. In her study of plant life she specializes the first year on the tomato plant. She learns a good deal of botany and horticulture before she actually takes up canning work. In most sections of the South the girls grow other vegetables in their gardens at the same time the tomatoes are growing. In addition they are encouraged to can and preserve all the surplus fruits and vegetables about their homes. Thousands of cans of peaches, berries, and beans are in pantries in the South where none existed a few years ago. A trade-mark, brand, and motto have been adopted for general use by the girls' clubs.

Three traveling exhibits, consisting of 44 photographs each, were used continuously during the year by the Forest Service. They were displayed at 48 schools and libraries, an increase of 3 over last year. There was a marked increase in the number of duplicate photographs furnished as gifts. The lantern-slide collection of the office of educational cooperation of the Forest Service now contains 8,812 slides. These slides have been used more for teachers' training schools

throughout the country this year than ever before. The special sets of slides with lecture outlines accompanying them have been in constant use.

A farmers' bulletin on "Forestry in agriculture" was prepared, and preparation was begun on a farmers' bulletin on "Forestry in geography," in cooperation with the Office of Experiment Stations.

During the past fiscal year the Bureau of Animal Industry has taken up the organization of boys' pig clubs in an experimental way. The work is being done in cooperation with the farmers' cooperative demonstration work of the Bureau of Plant Industry and the State agricultural colleges. The State of Louisiana was the pioneer in this work, and the bureau is paying part of the salary of the agent in charge in that State. An agent has also been placed in Alabama to supervise the organization of the boys of that State. There are 1,507 boys in the Louisiana clubs. An exhibit of 97 hogs owned by pig-club boys was made at the State fair. Some of these hogs were shipped over 250 miles to the fair and at least 50 of them would have made a creditable exhibit anywhere. There are 30 agricultural schools in Louisiana, and pig clubs have been organized at most of them. In Alabama the pig-club work was started late, but 10 counties have been organized and the work is proving popular.

When the girls' canning clubs were first organized by the agents of the farmers' cooperative demonstration work, it was proposed to make them poultry clubs as well. In fact, the official name is "Girls' canning and poultry clubs." For various reasons the poultry side of their work was neglected, largely on account of the lack of poultry experts. The bureau was asked to supply such experts, and a beginning has been made by stationing a poultryman in Virginia whose duty is to organize the clubs and instruct the demonstration agents in the principles of poultry raising. Twelve clubs have been organized in three counties in that State, and the movement promises to spread with remarkable activity.

Many exhibitions and demonstrations were made at expositions and on educational trains by members of the staff of the Office of Public Roads. Representatives of this office delivered 504 lectures, addresses, and papers in 39 States, including the District of Columbia. One new feature of this class of work consists in the lectures delivered before graded schools and summer schools. Three lecturers gave 51 addresses before school children in 13 States and the District of Columbia, and five other representatives of the office gave 21 lectures before educational institutions of college rank in various parts of the country.

The office has continued its policy of appointing graduates in civil engineering from the leading engineering institutions in the United States to the position of engineer student. During the fiscal year

1913 three highway engineers took furloughs from their positions in the Office of Public Roads to accept service in connection with road work in different parts of the country.

The same course of training as in former years has been given to the scientific appointees, and promotions are controlled by merit as before. The making of models of road and bridge work for use in educational institutions and exhibits is pushed more than ever before. More models are constructed and more extensive use is make of them.

EDUCATIONAL WORK OF THE OFFICE OF EXPERIMENT STATIONS.

The educational work of the Office of Experiment Stations has included the following lines of work:

1. Studies of agricultural schools with reference to the agricultural subjects which are or should be taught therein and the requirements of such schools as regards the subject matter of agricultural instruction and the facilities for such instruction, including textbooks, manuals, bulletins, apparatus, and illustrative material.

2. The preparation of publications for use in schools where agriculture is taught. These publications are chiefly based on the publications of the Department of Agriculture and the State experiment stations.

3. Special sets of lantern slides with lecture outlines accompanying them have been prepared. Of the special sets the following are prepared especially for school use: (1) The preparation and use of illustrative material for elementary agriculture, (2) agricultural education for negroes, (3) community work in the rural high school, (4) some types of children's gardens in the United States, (5) some features of high-school instruction in agriculture, and (6) the development of children's gardens in cities in the United States.

4. Continuance of the review of the world's literature of agricultural education in the Experiment Station Record.

5. A card directory of American teachers and investigators in agriculture has been revised and now contains about 2,500 names. This directory is maintained for the convenience of agricultural colleges and other institutions seeking trained teachers and investigators.

OCCURRENCES IN OTHER LANDS.

THE TENTH INTERNATIONAL CONGRESS OF AGRICULTURE.

A section of the Tenth International Congress of Agriculture, which was held at Ghent, Belgium, June 8–11, dealt with agricultural science and education. A detailed summary as to the status of agricultural research in various countries was presented by M. Toussaint, and an extended discussion followed. Among the con-

clusions ratified by the section were the following: Research institutions should be directed by scientists trained in experimental work; educational institutions should provide special facilities for research workers; the work of research should be separated, both as to location and supervision, from disciplinary duties, and absolute freedom from dictation of results should be guaranteed; research workers should keep in touch with original work elsewhere, and they should be assisted in this as follows: (1) Each publication relating to original work should be accompanied by a short summary; (2) each nation should issue an abstract journal summarizing its work, and (3) the publications of the International Institute of Agriculture at Rome should be extended to include abstracts of all research work. Each national department of agriculture should also provide a section for the dissemination and popularization of results of research.

It was agreed that each agricultural educational institution, irrespective of grade, should have available a tract of land for its work. No decision was reached as to the question of restricting stations attached to colleges to purely research work. Further consideration of a new system of classifying experiments on the basis of altitude instead of latitude was favored.

One session of the section was devoted to the subject of agricultural instruction. Following a discussion by M. Pasteur, the section voted that the organization of professional agricultural education is highly desirable in every country and that instruction methods should be used which develop the child's powers of observation and reflection. This section also favored beginning agricultural training at 12 years of age, and holding special courses arranged on a part-time basis for those engaged in farm work. It was the prevailing opinion that the agricultural work in special schools should be given by specialists and that normal courses should embody in their fourth year a large amount of practical work.

AFRICA.

The South African Union has offered five Government scholarships to sons of permanent residents of South Africa for study in agriculture abroad. The holders of the scholarships will receive $750 per annum for a period of from three to four years, and will be pledged then to enter the service of the Union for not less than three years at a salary of at least $1,500 per annum.

LATIN AMERICA.

A large number of candidates have this year presented themselves for matriculation at the agricultural colleges and apprentice schools of Brazil. The intermediate or theoretical-practical school at Bahia,

with which an apprentice school is connected, now has an attendance of 56 pupils, and a similar school attached to the Federal stud farm at Pinheiro has been opened with an enrollment of 35 students for the first year's course.

Additional apprentice schools have been established at Tubarao, on ground given by the State of Santa Catharina; at Satuba, in the former agronomic station and stud farm at Santa Luzia de Norte, given by the State of Alagoas; at Igarape, on the former Augusto Montenegro Experimental Farm, given by the State of Para; and at Guimaraes, in Maranhao. Measures are also in progress for the installation of an apprentice school at Sao Simao, in the State of Sao Paulo. Technical agricultural instruction is given by traveling professors and instructors apportioned to different zones in accordance with their respective productions.

Two permanent dairy schools have been opened, one at Sao Joao del Rey, and the other at Barbacena, and the Government is considering the establishment of a school of horticulture in some suitable locality. A bill was approved December 17, 1912, authorizing the establishment of schools of practical plowing and stations for the experimental culture of tobacco, cotton, and cereals at Angatuba, Porto Feliz, Capao Bonito do Paranapanema, Guarehy, and Sarapuhy.

The agricultural normal school at Santiago, Chile, is under reorganization, and its activities will be devoted entirely to agricultural subjects under rules and regulations to be issued by executive authority. The agricultural schools at Chillan, Concepcion, and Cauquenes will also be reorganized; and $10,950 has been appropriated for each of two agricultural schools to be established at Aconcagua and Rancagua, respectively. An agricultural congress, an exposition of agricultural machinery, and a stock show will be held in Concepcion during the latter part of October, 1913.

The Government of Colombia has accepted eight scholarships, including four in the school of agriculture and one in the veterinary school of the University of Santiago, offered to Colombian students by the Government of Chile.

The Haitian Government has made an appropriation for the establishment of an agricultural school, and negotiations are under way to engage professors from abroad to give instruction in the latest scientific agricultural methods. In the meantime, the secretary of agriculture proposes the organization of a traveling school of agriculture and that instructors be sent from place to place in the coffee-producing regions to teach the producers how to improve their plantations, etc. He proposes also the establishment of experimental agricultural fields in the coffee and cacao producing regions, to teach the farmers the rudiments of scientific farming. A bill was passed

last July establishing an agricultural school in the Department of the West.

Rafael Bustillo has been appointed assistant director of the school for the cultivation of tobacco at Danli, Honduras. This school has a considerable number of students, and under its influence the cultivation of tobacco in the Republic has greatly increased during the past few years.

BRITISH ISLANDS.

Prof. Bryner Jones, principal of the agricultural department of the University College of Wales, at Aberystwith, has been selected as the first commissioner of agriculture for Wales. His primary duty is to advise the board of agriculture and fisheries as to prospective grants from the development fund to Wales and on the agricultural work of the country generally. There will also be an agricultural council for Wales, which will meet every six months for the discussion of agricultural questions.

Steps are in progress at the University of Bristol to increase materially its activities in agricultural education and research. The university has recently become associated with the National Fruit and Cider Institution, established near Bristol in 1903 to carry on investigations in fruit culture and cider making, and it will receive an annual grant of $12,500 from the development commission for research in fruit growing and fruit diseases. The university will also obtain $25,000 additional from the development commission for the purchase of land and the erection of laboratories and other buildings; it has raised a like amount from other sources for these purposes.

The foundation stone of a new agricultural college, provided for in a bequest of the late C. S. Hayne, was laid on an estate of over 200 acres, near Newton Abbott, Devonshire. About $500,000 is available for the institution, of which $100,000 will be utilized for buildings, and the remainder will be held as a fund for administrative purposes. The institution will provide agricultural instruction and will also become a research center for the region.

An Imperial Bureau of Entomology has been definitely organized under the financial support of the British Government and its various dominions and colonies. It supersedes the entomological research committee appointed in 1909, that body now becoming an honorary committee of management of the new bureau, with the Earl of Cromer as its president and scientific secretary. Guy A. K. Marshall has been appointed director of the bureau and editor of the Review of Applied Entomology. That journal was established in January, 1913, and is published monthly in two parts—Series A dealing with agricultural entomology and Series B with medical and veterinary entomology.

In addition to the publication of this journal, the functions of the bureau are announced as including the making of a general survey of the noxious insects of the world, the collection and coordination of information relating thereto, and the authoritative identification of insects of economic importance when submitted by the departments of agriculture and public health of the British Empire. It will also continue the publication of the Bulletin of Entomological Research.

CANADA.

The Government of Canada has appropriated $10,000,000 to cover a period of 10 years beginning with the year ending March 31, 1914, for instruction and research in agriculture. This fund is to be distributed among the Provinces according to population. The sum of $700,000 will be allotted the first year and this amount will be increased by $100,000 annually until 1917, from which year, until 1923, $1,100,000 will be provided annually.

The work of the Federal department of agriculture is to be aided by assisting and developing the live stock, dairying, fruit growing, and other industries along lines of investigation, research, improvement in transportation, markets, etc. The assistance to be given to agricultural education will include increasing the facilities and equipment of the agricultural colleges, the establishment of agricultural, dairy, and horticultural schools and short courses, the introduction of agricultural teaching into the public schools, and agricultural extension work. The sum of $20,000 a year will be divided between veterinary colleges which grant degrees and come up to a required standard, and an additional sum of $20,000 annually will be allotted to each Province regardless of population. Federal supervision over the expenditures by the Provinces is provided, and there will be Federal inspection of the work done and a detailed annual report will be made to Parliament.

The Manitoba Provincial Department of Education is endeavoring to introduce agricultural teaching into the secondary schools of the Province. As a result of its efforts, two townships have agreed to appoint an agricultural instructor, and the Stonewall High School began instruction last year. The Government is to pay one-half the salaries and otherwise assist in making the course successful. Regular short courses were scheduled from November 1 to April 1, covering work as nearly as possible in line with that done in the first two years of an agricultural college course. Experimental or demonstration work will also be carried on by students on their own farms under the supervision of the instructor.

Since the opening of the Nova Scotia Agricultural College at Truro about eight years ago the attendance on the regular and short courses has increased from 85 to 450. The main building has been

doubled in capacity, and a horticultural building, with greenhouses and provision for the entomological department, and a modern horse barn have been erected, and about 40 acres have been added to the farm.

Ten-day courses were held for the first time on Prince Edward Island, at Charlottetown, from January 27 to February 8. These courses included instruction in live stock, poultry, horticulture, soil cultivation, seed selection, dairying, and home economics for women.

Half-fare railway rates were secured for all who attended, and scholarships valued at $5, together with free transportation, were furnished those completing the course satisfactorily.

FRANCE.

A law of August 21, 1912, reorganizes the departmental and communal agricultural instruction in France. It establishes in each Department a bureau of agricultural services, to replace the departmental professors of agriculture previously authorized. This bureau is to have charge of the dissemination of agricultural knowledge, agricultural instruction in public educational institutions, economic and social aspects of agriculture, including agricultural insurance and rural hygiene, agricultural information, statistics, direction of experiment fields, technical researches and commissions, and in a general way of all agricultural interests, with the exception of the veterinary and forestry services in the agricultural stations.

The departmental professors of agriculture will be known hereafter as the directors of the agricultural services and will be assisted by special professors in charge of certain local districts. Both the special professors and directors will be subject to the general supervision of the Minister of Agriculture.

INDIA.

A scheme for the establishment of a staff of district vernacular agriculturists in Burma has been sanctioned as an experimental measure, and six men have been selected for a nine months' course of training as district agriculturists, which ended March 1. Special emphasis was laid on practical agriculture, but instruction was given also in the theory of agriculture, chemistry, the elements of botany and entomology, principles of cooperation, and the general duties of district agriculturists. Twenty students not applicants for the position of district agriculturist were also admitted to the course.

Under the scheme for the development of technical education, school gardening and nature study will be introduced into the schools of the large Christian Karen community. The local government

made a grant of $1,600 for equipment at Shwegyin and Ngaunglebin, where school gardens have been started, and instruction in agriculture and nature study is given by two Karens, who were trained at Mandalay. The Karen National Association has offered substantial financial assistance, and the Department of Agriculture is also giving its support. A book on school gardening has been prepared by C. Thomstone, deputy director of agriculture.

PHILIPPINE ISLANDS.

Under a law enacted by the Philippine Legislature February 7, 1913, the director of agriculture is authorized to establish and maintain stations for practical agricultural instruction and to organize and develop a system of cooperative agricultural instruction in such branches as soil selection and culture, the growing of vegetables, fruits, cereals, and other crops, the production of improved seeds and plants for distribution, and animal husbandry. The administration of these stations will rest with the director of agriculture, and with the approval of the secretary of public instruction he may appoint superintendents and all other employees, obtain lands, buildings, etc., and in general supervise the work of the stations. If deemed desirable, stations may be established by the bureau of agriculture in cooperation with any province, municipality, or agricultural association of the islands. The act became effective July 1, 1913, and carried an appropriation of 150,000 pesos ($75,000).

Twenty additional scholarships in the Forest School, at Los Banos, Laguna, have been established, apportioned among the various provinces and awarded on a competitive basis. Holders of these scholarships are to be employed by the bureau of forestry for a period equal to that occupied by the courses of instruction.

SPAIN.

A royal decree of April 11, 1913, provides for introducing instruction for the training of agricultural experts (Peritos agricolas) into the regional practical schools of agriculture at Valladolid and Zaragoza and the agricultural station at Albacete. The instruction will be given in three courses, the first two to continue from October 1 to May 31, respectively, and the third, during the summer months, will be devoted to farm practice. Students obtaining the title Perito agricola will be eligible to the position of assistant in the agricultural service.

AGRICULTURAL EDUCATION IN EDUCATIONAL CONVENTIONS.

ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

The twenty-sixth annual convention of the Association of American Agricultural Colleges and Experiment Stations was held at Atlanta, Ga., November 13–15, 1912. Four very interesting historical papers read at this meeting described the growth and development of the land-grant colleges, the United States Department of Agriculture, and the Experiment Stations. This part of the program celebrated the fiftieth anniversary of the Morrill Act, approved July 2, 1862, in accordance with which the land-grant colleges have been established, and the organization of the United States Department of Agriculture under the act of May 15, 1862. It also marked the twenty-fifth anniversary of the Hatch Act, which gave us the Experiment Stations.

Dr. A. C. True, Director of Office of Experiment Stations, chairman of the committee on instruction in agriculture, made a report on the work of the agricultural colleges in the training of teachers of agriculture for secondary schools, which included the following recommendations:

> Teachers of agriculture in secondary schools should have not less than 20 semester hours of professional training, including instruction in educational psychology, history of education, pedagogy, and special school methods applicable to agriculture in the secondary schools, supplemented by practice teaching.

In all sections of the convention where the matter of courses of study was discussed there was an expression of a desire for differentiation, and for a broad general course in undergraduate work with specialization in graduate work. Agricultural colleges must now prepare the practical farmer, the technical man for experiment station work, teachers of agriculture, and extension workers. It was the prevailing opinion that the same course would not do for all four classes, but that there is danger in differentiation until after the foundation is laid in general subjects.

In the extension-service session of the meeting some time was spent in discussion of the relation of the extension service to the public schools, of leaflets and bulletins, of teachers' institute, boys' and girls' club work, etc.

The work of the land-grant colleges was well summed up by Dr. W. A. Thompson, president of Ohio State University. In speaking of the influence of the Morrill Act upon American higher education, he said in part:

> The influences of the land-grant colleges upon higher education would, among other things, include the following:

First, they have greatly stimulated the interest of the people in higher education as manifested by unparalleled appropriations. I shall not trouble you with the figures, since it is a matter of common observation that the revenues provided for higher education in the several States have already passed the fondest hopes and the most vivid imagination of the men who organized these colleges. They have been limited only by the State's ability to provide. They have rarely, if ever, been the occasion of popular discontent, political overthrow, or corrupt management. The young men and young women enjoying the benefits of these institutions have in a large majority of instances justified the expenditures.

Second, the debates clustering about the passage of the land-grant act, coupled with the experience of the colleges, have set a precedent and proved the wisdom of Federal aid to education. The fact that certain limitations have been put upon the expenditure of money provided by the Federal Government is to be interpreted as directive and not as setting a limit to the Federal Government's activities. I am out of sympathy with the theory that the Federal Government may promote industrial or vocational education exclusively.

Third, the experience and history of these colleges have brought industrial education to its rightful place in the esteem of the American people and have forced its recognition by all institutions for higher education.

Fifth, these institutions have stimulated investigation and research in many fields. I shall not assume that the only investigations in applied science are to be found within the walls of the land-grant colleges, but it is safe to say that these same colleges have stimulated other institutions to carry their investigations into fields that might have been neglected but for the sympathetic interest aroused in agricultural colleges and experiment stations.

Sixth, while not specifically related to the topic of this paper, I can not refrain from suggesting that the influence of these colleges upon the Government itself has had something to do with the cause of higher education.

I am disposed, therefore, to believe that the Government's entrance into the cause of education has resulted in making it more humane, more just, less to be feared, and more to be loved. I know of no agency that has done more to unite the North and the South, the East and the West, in a bond of common patriotism than the activities of the Government arising out of the organization of the Department of Agriculture, the land-grant colleges, and the experiment stations.

The semicentennial and the quarto centennial of these institutions seem, therefore, an appropriate time to express our appreciation of what these institutions have been, of what they are becoming, of what they have done, and to renew our patriotic devotion to the agencies that have done so much for the uplifting and inspiration of the common people.

THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF AGRICULTURAL TEACHING.

The third annual meeting of the American Association for the Advancement of Agricultural Teaching convened at Atlanta, Ga., November 12, 1912. The program was devoted principally to a discussion of the method of teaching agriculture in the high school and the preparation of teachers for this work.

The opportunity and responsibilities of agricultural colleges for the preparation of teachers of agriculture were discussed from two standpoints, viz: (*a*) In the regular courses and classes, by Dean H. L. Russell, University of Wisconsin, and (*b*) in special courses

and classes by Dr. Kenyon L. Butterfield, president of Massachusetts Agricultural College. In discussing these papers D. J. Crosby, of the United States Department of Agriculture, emphasized the importance of giving attention to the professional side of the teacher's training course, while R. W. Stimson, of the Massachusetts Board of Education, thought that not enough time is given to agricultural subjects.

W. G. Hummel, of California, discussed the content of the first year's work in high-school agriculture. He suggested the need of a general course to give the student the proper foundation for the science he will study later. His course, as outlined, called for practical exercises both in the laboratory and the field, which include the elementary principles of the various sciences. This plan Mr. Hummel has found to succeed in high schools where he has tried it.

F. B. Jenks, of the Bureau of Education, leading the discussion of this paper, suggested that the course should be adapted to the needs of the community and designed to encourage more boys to enter high school by offering subjects that would appeal to them as being of practical value.

R. W. Stimson presented an interesting report on the use of land in connection with the teaching of agriculture.

The principal papers read at this meeting were published as Bulletin, 1913, No. 14, of the Bureau of Education.

DEPARTMENT OF SUPERINTENDENCE.

The annual meeting of the Department of Superintendence of the National Education Association was held in Philadelphia, February 24–28, 1913. The emphasis of this meeting was placed very largely upon industrial and vocational education, agricultural education receiving its full share in the discussions.

The committee on agriculture held two sessions. The first was devoted principally to the methods of introducing agriculture and manual training into schools without special teachers or supervisors. At the second session the boys' and girls' club movement was discussed. Suggestions were made as to the advisability of holding State and National exhibits upon a systematic and uniform basis, but no definite action was taken in the matter.

At the session of the School Garden Association of America it was urged that use be made of vacant lots in cities and towns for school gardens and agricultural teaching of pupils having no available land at home and that wherever possible the pupils should be encouraged to carry on this garden work and agricultural project at home.

School credit for home work was advocated by several speakers, notably L. R. Alderman, State superintendent of public instruction of Oregon.

The tenor of the whole meeting was a plea for a better understanding between educator and layman and for closer cooperation between all educational forces.

CONFERENCE FOR EDUCATION IN THE SOUTH.

Rural betterment was the central theme of the sixteenth annual conference for education in the South, held at Richmond, Va., April 15–18, 1913. There were sessions devoted to cooperation, farm demonstrations, the country church, education of women, problems of the rural school, training and certification of teachers, college extension, the trend of negro education, etc.

Cooperation was the keynote of the conference, which was composed of farmers, business men, clergymen, school-teachers, superintendents, supervisors, and representatives from normal schools, colleges, and universities.

There was no theorizing nor painting of ideal pictures, but a thoroughgoing discussion of present-day topics, all viewed from the practical standpoint of everyday life and conditions which exist in the Southern States.

Abstracts of the principal papers read at this meeting were published as Bulletin, 1913, No. 30, Bureau of Education.

AGRICULTURAL EDUCATION AT OTHER CONVENTIONS.

The seventeenth annual meeting of the American Association of Farmers' Institute Workers was held November 11–13, at Atlanta, Ga., with representatives from 36 States, 2 Provinces of Canada, Porto Rico, and the District of Columbia.

The address of the president, Franklin Dye, was a discussion of the general agricultural situation in the United States and specifically of some of the problems with which the farmers' institutes must deal. Among these were waste through improper farming, lack of method in marketing, and waste of food in the kitchen and of plant food on the farms and through the maintenance of unprofitable animals.

The committee upon institute organization and methods recommended a change of the organization unit, holding that the county is too large an area in most of the States, and that with the township or community unit, all farmers could attend, and monthly meetings could be held in many localities. The committee on cooperation with other educational agencies recommended the appointment of a national commission on agricultural education, whose duty it should be to map out the fundamental functions of the different types of educational institutions, and to recommend ways in which a balanced system of agricultural education can be developed with the greatest efficiency and a minimum of duplication. This matter was referred to

the executive committee for action. Reports were received from the committees on institute lecturers, movable schools of agriculture, and women's institutes.

The first topic in the general program was the special province of the farmers' institute. The conclusions reached were that there should be in the modern institute meeting a well-defined purpose to make it prepare for more specialized and advanced kinds of extension. The field of the institute is distinctive, but not exclusive, and lies chiefly in new territory where there are no facilities for such undertakings as farmers' short courses and the like. The institute also has a place in organized territory where the short course has come, the agricultural train has passed, and the movable school of agriculture has been held.

As regards the relative value to the farmers of the one-day and two or three day institutes, it was concluded that one-day institutes, although requiring the maximum expense in time and travel, are useful and economical in communities where the families are widely scattered or where the institute habit has not been established. Two-day institutes are a logical sequence to the one-day institute, and more economical of time in the field. The three-day institute enables the workers to do a higher grade of instruction work so far as the individual is concerned, but reaches fewer persons. All three types are deemed necessary, according to the special needs of each community.

THE AMERICAN FARM MANAGEMENT ASSOCIATION.

The third annual meeting of the American Farm Management Association was held at Washington, D. C., January 21–23. The presidential address was delivered by W. J. Spillman, of the Department of Agriculture, on "The new point of view." It discussed in detail some of the fundamental principles of farm management work.

The initial session of the meeting discussed the subject of the teaching of farm management. A report from the standing committee was presented by G. F. Warren, of Cornell University, and "The qualifications of the teacher of farm management" were discussed by H. Hayward, of the Delaware College and Station. An address on "Teaching farm management in the consolidated rural school" was given by Assistant Secretary Hays of the Department of Agriculture, in which he spoke optimistically of the possibilities in this direction.

A. Boss described the plan now on trial at the University of Minnesota, by which a few selected senior students in farm management are put in charge of private farms leased to the university. Each student manages a farm for one year under the close supervision of the institution. A special certificate in addition to the bachelor's degree is awarded upon the successful completion of this work, and the student

is also entitled to any profits up to $50 a month which he may be able to obtain.

D. H. Otis explained a vacation course offered at the University of Wisconsin, in which about six boys are taken for an inspection trip of from three to six weeks. During this trip they live in tents, making preliminary surveys and maps of the localities visited, and otherwise familiarize themselves with local details. A general discussion of teaching methods followed, much interest being manifested in ways of increasing a student's efficiency along practical lines.

NATIONAL CORN EXPOSITION.

The Fifth Annual Corn Exposition, which was held at Columbia, S. C., January 27 to February 8, was of large educational significance. A total of 67,000 square feet of floor space, with a liberal annex, was filled with exhibits from about 25 agricultural colleges and experiment stations and from the Department of Agriculture. One feature of the exhibit of the Department of Agriculture which attracted much attention was a cattle-dipping tank, with which daily demonstrations in tick eradication were given.

Some very striking exhibits were also made by many of the agricultural colleges and experiment stations, as well as by other educational institutions. The station exhibits for the most part dealt especially with some one important phase of their work. Thus, Cornell gave special prominence to plant breeding, Kansas to animal husbandry, Rhode Island to the use of lime and other fertilizers, and Ohio to soil fertility. A model rural community center from Illinois attracted much attention, as did an exhibit by Winthrop College of three model farms for southern conditions. Much prominence was also accorded the boys' corn clubs and girls' tomato clubs.

NEW YORK CHILD-WELFARE COMMITTEE.

Under the auspices of the New York child-welfare committee the second conference dealing with problems relating to the education of dependent and delinquent boys and girls was held in New York City March 7–8, 1913.

This conference was devoted particularly to instruction and training in the trades, but there were numerous incidental references to agricultural education. An evening session was devoted to an illustrated lecture dealing with agricultural education at the Lincoln Agricultural School, Lincolndale, N. Y., and at the Berkshire Farm School, Canaan, N. Y. On the afternoon of the second day there were round-table conferences on home economics, agricultural education, equipment for industrial departments, and industries for crippled children.

The conference on agricultural education dealt particularly with individual projects for boys in institutions and the remuneration of boys for their services in such institutions. It was the consensus of opinion that, so far as possible, individual projects should be provided for, and the boys should be given some pecuniary interest in the yields from these projects. However, it was pointed out that in State institutions it is practically impossible to secure funds to pay students or inmates for their services, and a resolution was adopted by the conference looking to the correction of this difficulty in New York.

INTERNATIONAL ASSOCIATION OF POULTRY INSTRUCTORS AND INVESTIGATORS.

The first conference of the International Association of Poultry Instructors and Investigators took place in London, England, July 18–24, with 27 countries represented. Lord Lucas, parliamentary secretary of the board of agriculture and fisheries, welcomed the delegates on the part of the British Government. He stated that the establishment of a national poultry institute is under consideration for the scientific study of questions related to poultry husbandry and for training instructors for the county work.

A permanent organization was effected, E. Brown, of London, England, being chosen president, and Dr. Raymond Pearl, of the Maine Experiment Station, secretary.

A resolution was adopted providing for holding in 1914 a world's poultry congress, representing all sections of the industry. The association voted to institute fellowships to be conferred on such persons as shall have rendered service of the highest distinction to the advancement of the poultry industry. These fellowships are to be conferred by vote of the entire association, and are restricted in number to five every three years.

A central bureau of information will be established, located for the present in London. It will contain an historical section, illustrative material, etc. The publication of a journal is also contemplated.

ILLINOIS FEDERATION FOR COUNTRY-LIFE PROGRESS.

A State conference on country life was held at De Kalb, Ill., August 1 and 2, which called together representatives of every type of rural organization and discussed all phases of country life. A unique and helpful feature of this conference was a country-life exhibit, to which many local and national organizations contributed. The conference was the second annual meeting of the Illinois federation for country-life progress, a State-wide organization designed to unite all rural-progress agencies of Illinois in one large, comprehensive campaign for the improvement of country life.

CHAPTER X.

TENDENCIES IN COMMERCIAL EDUCATION.

By Joseph French Johnson,

Dean of the School of Commerce, Accounts, and Finance, New York University.

Contents.—Life experience of workmen's sons—Three conspicuous movements—German continuation schools—Coordination schools—University schools of commerce—Commercial education fostered by private corporations—Extension work in commercial subjects—Conclusion.

LIFE EXPERIENCE OF WORKMEN'S SONS.

The most important tendency in commercial education in the past year is the growing desire to place stress on vocational guidance. Out of the mass of statistics that have been compiled the life experience of the average child of the workingman of the Nation can be seen to run somewhat like this: The parent desires to give his child the advantages of education. He realizes, however, that the child will soon have to be an economic factor in his family, and with the rising cost of living the change from student to wage earner is imminent. He, therefore, tries to crowd in as much vocational education as possible. The average teacher of the child is anxious to spell success out of the success of his student, and everywhere we find the school reaching out to the industry to get it to recognize the value of the school's service by buying the school's product. The employer realizes the value of the training and comes to the school for service. He is well pleased with the graduates of the school, and makes further offers, with the result that pressure is brought upon the child, first, by economic necessity of the family, and, second, by the economic demands of industry, to discontinue his educational process and to become a wage earner at an early age. At the time the child's classmates have graduated he has worked himself up to the place where his services are more valuable than those of the graduates just going into business life. Gradually the graduates creep up, reach him, and pass him; and after this process has gone on for three or four years the child, now grown to be a young man, realizes that he has lost something, and then looks about for some way to repair the damage. He has learned something in the school of experience, he is energetic

and ambitious, and he is the typical man who seeks to enter upon the extension work of universities.

It is unnecessary to quote from any of the many reports of educational experts on the subject. The general consensus of opinion seems to be that some way out of the present difficulty must be found, and that the high mortality in the commercial high schools must be offset either by some form of inducement to keep the student in the school or by some form of education for those who withdraw. Undoubtedly we are looking to Germany to solve the problem. Educational experts are expecting to find in that country the means as well as the experience.

THREE CONSPICUOUS MOVEMENTS.

Three distinct movements are on foot to make commercial education serve the purpose of helping students in the conditions in which they find themselves: (1) Continuation schools; (2) coordination schools; (3) university schools of commerce.

The work of the German continuation schools has not been very widely tried in America. Possibly the best example is in Wisconsin. The following report of the work is taken from the bulletin No. 34, Report of the Committee on Industrial Education, H. E. Miles, Chairman, at the Eighteenth Annual Convention of the National Association of Manufacturers, Detroit, Mich., May 21, 1913:

> Wisconsin two years hence will have from 20,000 to 40,000 who are or have been in her industrial continuation schools, many of them splendid in promise, ability, and enthusiasm. Indeed to-day enough students could be found to make several trade schools larger than any now in America, and every one an extra good man.
>
> The trade school of the future will be far less on the order of a close corporation, far less for the favored few only—favored financially, not intellectually.
>
> It will give the utmost of opportunity to the bright fellow who can come nights only, or only a few hours of daytime per week, also to the half-time "cooperative" students, who by special arrangement between school and factory take "a week about" between school and factory, as in the Cincinnati College of Engineering, where under natural selection factory workers are being lifted from the lower levels to the top places in American engineering, earning their way splendidly as they go. And, lastly, those who can spend all the time in study will be cared for somewhat as at present, but with greater care for the individual as such and less of pressure into classes and squads as such.
>
> We may well be grateful to the directors of trade schools for doing what the country has permitted them to do these long years. None will rejoice more than they in the coming new industrial continuation schools and the new trade schools, and none are doing more to hasten the day of general trade education of the masses with their millions of pupils to attend the trade schools of the future.
>
> Compulsory attendance from the fourteenth to the sixteenth year (better the seventeenth or eighteenth) is necessary for children in employment, and for that 50 per cent of the children of the Nation who leave school by the end of the sixth grade. Anything else is a continued playing and compromising with right and necessity. This education is not a boon nor a privilege. On the part of the child it is a birth-

right. On the part of the State it is absolutely necessary for the safety and advancement of society. To leave attendance optional is to substitute for necessity and right personal preferences, good nature, and more or less cheap persuasion. It is to have some employers and some parents do right because they are willing, and others sacrifice the children intrusted to them for any one of a thousand cheap excuses. When any State, notably one like Massachusetts, seeing the right, so legislates, argument and cavil cease, and the public in short order happily conforms.

There is no chance that Wisconsin will be overproud or overconfident in her work. She will have to demonstrate continually that her industrial continuation schools are *real* industrial continuation schools and not merely general continuation schools with a smattering of the industrial. She is simply doing the altogether common-sense and ordinary thing, as previously done for 100 years in countries more enlightened educationally. The last figures from Wisconsin are, however, a demonstration.

Her laws were passed too late in 1911 for much to be accomplished in the school year 1911–12. Only two schools were started with 700 pupils. Last fall about 30 schools were opened with from 3,000 to 5,000 pupils. In November the enrollment was 10,000, and by February it had risen to 16,000. Half of the pupils, those between 14 and 16, are enrolled under the compulsory attendance law; the others or the older ones are in voluntary attendance, mostly in the evening schools. The State limits its aid to 30 schools and $3,000 to any one school. The number of schools will be increased to 45 by the legislature now in session. The number of students next year will not be less than 25,000; it may be much more than that.

The compulsory attendance is for only five hours a week, and the aid is limited to one-half the actual maintenance cost. Except in Milwaukee, the $3,000 limit will meet half the expense of each school. This expense per student year proves to be about $10. The students continue in employment and almost invariably, by grace of the employers, without loss of wages for the hours spent in school. Contrast this $10 per year per student with the $30 average cost in the elementary schools of the country, $75 in the high schools, $100 to $250 in the so-called trade high schools, and $250 or more in trade schools. An additional $250 or $450 or more must be added to the latter figures, as the student's loss of wages.

It would seem that such figures as these should act as closure on debate, and cause everyone to turn his back upon the old attempts and give speedy and even-handed justice to the great body of the working people and their children through continuation schools. Too long have Americans measured accomplishment by money expenditure and felt that big money appropriations are the surest way to success. The wisdom of those who framed the Wisconsin laws on industrial education enables and requires her State and the local boards to make shrewd social engineering and cooperative effort take their proper place as infinitely better than great money expenditure.

To care for her 16,000 students not a single building was erected; in only one city was there any outlay worth mentioning for rent, and the expenditure for equipment was very slight.

While the continuation school gives practical industrial training to the industrial worker after he has left the common schools, and usually gives him a total of only a half day's or a day's instruction per week, he being excused from employment for that time, it is by no means limited to this. In Fond du Lac two domestic servants are going from 10 to 20 hours per week; two boys, working for their father, are going 10 and 15 hours. In Racine a boy of 16 who had worked only two days in two years was compelled to attend school five hours per week. After a few days he inquired: "Can't I stay more than five hours?" He then went continually till he got a good job and then again for five hours.

GERMAN CONTINUATION SCHOOLS.

We are still, however, in the research period, and are seeking information. One of the best statements of the work of the German continuation schools is that recently published under the auspices of the special committee on commercial education of the Chamber of Commerce of the State of New York, written by Dr. Kurt E. Richter. His conclusions are as follows:

The question may finally be asked, Have these commercial institutions justified their existence? The facts that they are so well patronized, that the number of them is slowly but constantly increasing, that the special training given in these institutions is more and more in demand, give a sufficiently satisfactory answer.

Prof. Dr. M. J. Bonn, director of the Munich Commercial College, has pointedly stated the aim of these institutions by declaring that the student should acquire "the commercial spirit," viz, he should be able to see the commercial situation in its true light, he should then possess the initiative to utilize this knowledge of the situation to his advantage, and finally he should have business sagacity enough to predict with fair accuracy the future trend of his own particular chosen business. This commercial spirit is the basis of all success. But it can not be emphasized too strongly that this commercial spirit must be counterbalanced by a broad and liberal education to prevent the business man from running into a rut and being reduced to a calculating mechanism. He should be not only an efficient business man, but also a thoroughly educated gentleman, broad minded, with liberal ideas, conversant on all topics, and thoroughly abreast and in sympathy with the times. He should be sufficiently conservative to appreciate the good in the old and sufficiently progressive to see and adopt the advantages of the new. Above all, he should be able *to think* and think rapidly, accurately, and deeply. Such men will necessarily meet with success in life. The man who can prove that he possesses "capital-producing" abilities is sought by capital more than anything else. Carnegie once declared that every large firm or organization is constantly searching for able and trained men; no article in the world's market is so much in demand; none is so high in price.

In 1904 Prof. Herrick, formerly of Philadelphia, stated that the entire system of German commercial education "may be charged with the defects of its virtues; those trained in it are well disciplined, but they are mechanical and sadly lacking in the individuality and initiative so characteristic of those trained in the schools of England and America." This charge was based upon observations made prior to the establishment of the last three colleges named and when the first three were still in their infancy and could not have any appreciable effect upon contemporary business life. This criticism may in a measure be verified with reference to the commercial "middle schools" (similar to our "high schools"), but it lacks all justification when made in regard to these colleges. Even the "middle schools" have been constantly improved since the above criticism was made, so that Dr. William Maxwell, one of the advanced educational thinkers of the present time, in an address made December, 1912, in Cooper Union, New York City, could compliment the Leipzig Commercial School by stating that New York City's High School of Commerce was modeled closely after that excellent institution.

In conclusion, let us note some expressions of opinion upon higher commercial education in Germany by several leading American educators, who, through years of study and close observation, have become authorities on such matters.

In an address before the Chamber of Commerce of California, President Wheeler, who spent years of study in Germany and who some time ago was exchange professor in Berlin, stated, in part: "Germany led the way in applying what the university had

to teach to commerce and commercial problems. It has preeminence in production of dyestuffs, as it was the first to experiment with beet-root culture. Men said of both that they were vagaries of university men. You go out to-day into the nearer East and find in Asia Minor, in Turkey, in Greece—find everywhere—the German consul as a trade agent. He can speak the language of the country, read its newspapers, in short, is an integral part of the community. It is this 'practical' diplomacy as much as political diplomacy, that has made Germany what it is to-day. But never yet was a German consul appointed because he was 'somebody's man,' but because he was 'the' man for the position."

Showing the need for a higher training of our own business men, he continued: "American merchants have found that we have become an exporting nation. Our politicians have exerted all efforts to devise means to keep other people's wares out of the market, but now we ought to exert all efforts to trade with the whole world."

Dr. Edmund James, president of the State University of Illinois, recently said: "We Americans can learn more from Germany than from any other country. A land not as large as Texas which nevertheless supports a population two-thirds as large as that of the United States deserves to be studied more closely. As an industrial State, Germany to-day stands in the front rank; German science occupies the first place, and also German literature and art can favorably be compared with any other art and literature."

Prof. Richard T. Ely, of the University of Wisconsin, just returning from a year of study spent in Germany, published the following interesting observations: "The progress which Germany has made during the past 20 years is eminent in every respect. Like a father, the State cares for its people. Every German who has not a definite income, as well as every official, must insure himself against accidents, sickness, etc. The State expends large sums annually in order to establish continuation schools, in which young laborers receive free instruction."

The commercial colleges of Germany, however, are not only training the leaders in business life, but are also destined to be the real training schools for the men of public affairs, for city and State officials, for domestic and diplomatic service. In performing this function these commercial colleges will exert the greatest influence upon both the commercial and the political development of the country and will thus become important factors in maintaining Germany in the present prominent place which it occupies in the council of the world's great commercial powers.

COORDINATION SCHOOLS.

Much credit undoubtedly is due to Cincinnati for being a pioneer in coordination work in the United States. It has been most active in pushing its work and in collecting data upon which organized coordinating work can be done in other cities. Already the idea has found favor in the high schools of Boston and some of the western cities. The following excerpt from a paper by Helen Thompson Woolley, director of child labor division, Cincinnati public schools, gives the method of coordination:[1]

The second application I wish to make deals with a problem also previously discussed in The Survey—the question as to whether vocational and industrial schools shall be organized from within our present school system and kept in organic relation with it, or shall be organized under a separate board made up not from the leaders of education, but from the leaders in industry. I would like to ask this question: Have the dealings of industry with children in the past been such as to warrant the State in turning over the training of the children destined for industry to the forces of

[1] The Survey, Aug. 9, 1913.

industry itself? The report I have given shows the status of children under one of the best child-labor laws in the country, well enforced. There is very little suggestion of an educational attitude on the part of industry toward the children.[1] The undoubted educational possibilities of the industries are left undeveloped, and it is exceedingly rare to have an interest in the development of the children prominent in the mind of the employer. This is a state of mind which is quite understandable. With the best intentions the employer can scarcely avoid viewing the educational problem first from the standpoint of the welfare of the industry. He wants more efficient workmen, first of all because the industry would profit by them. In his mind, the welfare of the worker must be a secondary result of the success of the industry, and he has scant patience with any one who suggests moulding the industry to fit the needs of the workers.

Now there is undoubtedly a sense in which the welfare of the worker is secondary to the success of the industry. It is an obvious enough fact that the industry must be successful enough to exist or the worker can not earn his living by it. But when the scale which measures the success of the industry is solely the profits of the employer, it ceases to be true that the welfare of the industry and that of the worker must be the same.

It makes a very great difference, then, whether those who mold the system of industrial education in this country have as their immediate object the development of industries in which the workers are first of all parts of the machine, or the development of well-rounded, intelligent citizens, who shall possess specific industrial ability as one phase of their training. The habit of mind of the educator would lead him to take the latter attitude, and that of the leader of industry the former.

But the plan would be objectionable even if industry were so socialized that its leaders could be expected to view the problem of industrial education first from the standpoint of the development of the individual child. It would mean a sharp separation at a comparatively early age of the children destined for industry from those destined for academic and professional careers. The decision would inevitably be made rather on the basis of the economic status of the family than on that of the child's fitness. The plan would lead us directly toward class distinctions of a thoroughly undemocratic sort. As John Dewey has declared: "Those who believe in the continued separate existence of what they are pleased to call the lower classes or the laboring classes would naturally rejoice to have schools in which those classes would be segregated. And some employers of labor would doubtless rejoice to have schools supported by public taxation supply them with additional food for their mills. All others should be united against every proposition, in whatever form advanced, to separate training of employees from training for citizenship, training of intelligence and character from training for narrow industrial efficiency."

UNIVERSITY SCHOOLS OF COMMERCE.

The third important movement which has made great headway in the development of higher education along commercial lines is in our universities. This form of education started in 1884 in the University of Pennsylvania, and in 1900 New York University established the first evening School of Commerce, Accounts, and Finance. The schools have grown in number, and each school has largely increased its enrollments. During the academic year 1912–13, New York University had over 1,800 students on its rolls.

[1] The continuation schools for machine-shop apprentices in Cincinnati, which were started by the industries, are important exceptions to this statement, though they apply only to children over 16 years of age.

Universities and colleges which offer courses in commerce.

[Compiled from printed catalogues and from replies to a general inquiry made by the Bureau of Education.]

Alabama:
- St. Bernard—St. Bernard College—Commercial department.
- Spring Hill—Spring Hill College.

Arizona:
- Tucson—University of Arizona—Department of economics.

Arkansas:
- Arkadelphia—Ouachita College—Business department.
- Conway—Central College—School of business.
- Little Rock—Philander Smith College (colored)—Commercial department.

California:
- Berkeley—University of California—College of commerce.
- Los Angeles—Occidental College—Department of commerce.
- Los Angeles—St. Vincent's College—Commercial courses.
- Oakland—St. Mary's College—School of commerce.
- Stanford University—Leland Stanford Junior University—Department of economics.

Colorado:
- Boulder—University of Colorado—College of commerce.
- Denver—College of the Sacred Heart.
- Denver—University of Denver—School of commerce, accounts, and finance.
- Greeley—State Teachers College of Colorado—Department of shorthand and typewriting.

District of Columbia:
- Washington—Howard University (colored)—Commercial college.

Florida:
- Deland—John B. Stetson University—Department of business administration.
- Sutherland—Southern College—Business course.
- Winter Park—Rollins College—Business school.

Georgia:
- Athens—University of Georgia—School of commerce.
- Dahlonega—North Georgia Agricultural College—Department of business science.

Idaho:
- Caldwell—College of Idaho—Commercial department.

Illinois:
- Aledo—William and Vashti College—Business school.
- Bourbonnais—St. Viateur's College—Commercial department.
- Carlinville—Blackburn College—Special courses for business training.
- Chicago—St. Stanislaus College—Commercial course.
- Chicago—University of Chicago—School of commerce and administration.
- Decatur—James Millikin University—School of commerce and finance.
- Evanston—Northwestern University—School of commerce.
- Ewing—Ewing College—Commercial school.
- Greenville—Greenville College—School of commercial science.
- Naperville—Northwestern College—School of commerce.
- Quincy—St. Francis Solanus College—Commercial department.
- Rockford—Rockford College—Secretarial course.
- Rock Island—Augustana College—Commercial department.
- Urbana—University of Illinois—School of commerce.
- Wheaton—Wheaton College—Commercial courses.

Indiana:
- Bloomington—Indiana University—Commercial course.
- Collegeville—St. Joseph's College—Commercial department.
- Fort Wayne—Concordia College—Bookkeeping and arithmetic.
- Goshen—Goshen College—Business school.
- Merom—Union Christian College—Commercial department.
- Notre Dame—St. Mary's College and Academy—(No separate department).
- Notre Dame—University of Notre Dame—Commercial school.
- Upland—Taylor University—Commercial courses.
- Valparaiso—Valparaiso University—Department of commerce.

Iowa:
- Cedar Falls—Iowa State Teachers College—Department of commercial education.
- Charles City—Charles City College—School of commerce.
- Fairfield—Parsons College—Business courses.
- Fayette—Upper Iowa University—School of commerce.
- Hopkinton—Lenox College—Commercial course.
- Indianola—Simpson College—School of business.
- Iowa City—State University of Iowa—School of social and political science and commerce.
- Iowa Falls—Ellsworth College—School of commerce.
- Lamoni—Graceland College—Commercial school.
- Mount Pleasant—Iowa Wesleyan College—Business college.
- Mount Vernon—Cornell College—Commercial school.
- Oskaloosa—Penn College—School of commerce.
- Pella—Central College—Commercial department.
- Sioux City—Morningside College—Commercial branches.
- Storm Lake—Buena Vista College—Commercial department.
- Tabor—Tabor College—Commercial department.
- Toledo—Leander Clark College—Business college.
- University Park—Central Holiness University.

Kansas:
- Atchison—Midland College—Business course.
- Atchison—St. Benedict's College—Business department.
- Baldwin—Baker University—Commercial courses.
- Highland—Highland College—Business school.
- Holton—Campbell College—Commercial department.
- Kansas City—Kansas City University—Commerical department.
- Lindsborg—Bethany College—School of business.
- McPherson—McPherson College—Commercial department.
- Ottawa—Ottawa University—Commercial department.
- St. Marys—St. Mary's College—Business courses.
- Salina—Kansas Wesleyan University—College of commerce.
- Topeka—Washburn College.
- Winfield—Southwestern College—School of business.

Kentucky:
- Berea—Berea College—Business school.
- Glasgow—Liberty College for Women—School of business.
- Lexington—Hamilton College for Women.
- Russellville—Bethel College—Business department.
- St. Mary—St. Mary's College—Commercial department.

Louisiana:
- Baton Rouge—Louisiana State University and Agricultural and Mechanical College—Commercial course.
- Convent—Jefferson College—Commercial course.
- New Orleans—New Orleans University (colored)—(No separate department).

Maine:
- Van Buren—Van Buren College (St. Mary's)—Commercial department.

Maryland:
- Baltimore—Mount St. Joseph's College—Commercial courses.
- Emmitsburg—Mount St. Mary's College—Commercial department.

Massachusetts:
- Boston—Boston University—College of business administration.
- Boston—Simmons College—Department of secretarial studies.
- Cambridge—Harvard University—Graduate school of business administration.
- Cambridge—Radcliffe College—(No separate department).
- Tufts College—Tufts College—Business course.
- Worcester—Clark College—Department of politiccal and social science.

Michigan:
- Adrian—Adrian College—School of business.
- Albion—Albion College—School of business.
- Ann Arbor—University of Michigan.
- Hillsdale—Hillsdale College—Business department.

Minnesota:
- Collegeville—St. Johns University—Commercial department.
- Minneapolis—University of Minnesota—(No separate department).
- St. Paul—Macalester College—(No separate department).
- St. Peter—Gustavus Adolphus College—School of commerce.

Mississippi:
- Brookhaven—Whitworth Female College—School of commerce.
- Columbus—Industrial Institute and College—Bookkeeping, stenography, and typewriting.
- Meridian—Meridian College—Commercial department.
- Port Gibson—Port Gibson Female College—School of commerce.

Missouri:
- Cameron—Missouri Wesleyan College—Commercial department.
- Lexington—Lexington College for Young Women—Business department.
- Liberty—William Jewell College—Business courses.
- Mexico—Hardin College—Commercial department.
- St. Louis—Christian Brothers College—Commercial department.
- St. Louis—St. Louis University—Commercial department.
- Tarkio—Tarkio College—Commercial department.
- Warrenton—Central Wesleyan College—School of business.

Montana:
- Bozeman—Montana College of Agricultural and Mechanical Arts—Commercial subjects.

Nebraska:
- Bellevue—Bellevue College—Shorthand and typewriting.
- College View—Union College—Department of commerce.
- Grand Island—Grand Island College—Commercial department.
- Lincoln—University of Nebraska—School of commerce.
- University Place—Nebraska Wesleyan University—(No separate department).
- York—York College—College of commerce.

Nevada:
Reno—State University of Nevada—(No separate department).
New Hampshire:
Hanover—Dartmouth College—Amos Tuck school of administration and finance.
New Jersey:
Kenilworth—Upsala College—School of commerce.
New Mexico:
State College—New Mexico College of Agricultural and Mechanical Arts—Industrial course in business.
New York:
Brooklyn—St. Francis' College—Commercial department.
Brooklyn—St. John's College—School of commerce.
Elmira—Elmira College—Vocational courses.
Keuka Park—Keuka College—Commercial course.
New York—Fordham University.
New York—Manhattan College—High-school department (commercial subjects).
New York—New York University—School of commerce, accounts, and finance.
Niagara University—Niagara University—Commercial department.
St. Bonaventure—St. Bonaventure's College—Commercial course.
North Carolina:
Belmont—St. Mary's College—Commercial department.
Charlotte—Elizabeth College—Commercial department.
Elon College—Elon College—Commercial department.
Greensboro—Greensboro College for Women—(No separate department).
Newton—Catawba College—Business course.
Oxford—Oxford College for Girls—(No separate department).
North Dakota:
Agricultural College—North Dakota Agricultural College—Commercial course.
Fargo—Fargo College—Commercial course.
Jamestown—Jamestown College—Commercial department.
University—University of North Dakota—(No separate department).
Ohio:
Ada—Ohio Northern University—Business department.
Athens—Ohio University—School of commerce.
Berea—Baldwin-Wallace College—Department of commerce.
Cincinnati—St. Xavier College—School of commerce, accounts, and finance.
Cincinnati—University of Cincinnati—College of commerce.
Cleveland—Western Reserve University—(No separate department).
Columbus—Ohio State University—Economics and sociology.
Dayton—St. Mary's College—Business department.
Defiance—Defiance College—Commercial department.
Findlay—Findlay College—Business college.
Oxford—Oxford College for Women—(No separate department).
Tiffin—Heidelberg University—Commercial department.
Toledo—St. John's University—English commercial course.
West Lafayette—West Lafayette College—School of business.
Wilberforce—Wilberforce University (colored)—Industrial department.
Wooster—University of Wooster—Academy of Wooster University.
Oklahoma:
Guthrie—Methodist University of Oklahoma—Commercial school.
Stillwater—Oklahoma Agricultural and Mechanical College—Business division.

Oregon:
- Albany—Albany College—Commercial course.
- Corvallis—Oregon Agricultural College—School of commerce.
- Forest Grove—Pacific University—Bookkeeping, stenography, and typewriting.
- McMinnville—McMinnville College—Commercial department.
- Philomath—Philomath College—Business school.

Pennsylvania:
- Beatty—St. Vincent College—(No separate department).
- Bethlehem—Moravian Seminary and College for Women—(No separate department).
- Gettysburg—Pennsylvania College—Commerce and finance.
- Grove City—Grove City College—Commercial school.
- Huntingdon—Juniata College—Business school.
- Philadelphia—La Salle College—School of commerce.
- Philadelphia—Temple University—Department of commerce, accounts, and finance.
- Philadelphia—University of Pennsylvania—The Wharton school of finance and commerce.
- Pittsburgh—Carnegie Institute of Technology.
- Pittsburgh—Duquesne University of the Holy Ghost—School of commerce.
- Pittsburgh—University of Pittsburgh—School of economics.
- Selinsgrove—Susquehanna University—School of business.
- South Bethlehem—Lehigh University—(No separate department).
- Villanova—Villanova College—Commercial course.

South Carolina:
- Clinton—Presbyterian College of South Carolina—(No separate department).
- Greenville—Chicora College.
- Hartsville—Coker College for Women—Commercial department.
- Orangeburg—Claflin University (colored)—Commercial department.

South Dakota:
- Brookings—South Dakota College of Agriculture and Mechanic Arts—Department of commerce.
- Huron—Huron College—Huron business college and school of commerce.
- Mitchell—Dakota Wesleyan University—School of commerce.
- Redfield—Redfield College—Commercial department.
- Sioux Falls—Sioux Falls College—(No separate department).
- Vermilion—University of South Dakota—Commercial department.

Tennessee:
- Cumberland Gap—Lincoln Memorial University—Commercial department.
- Memphis—Christian Brothers College—Commercial course.
- Milligan—Milligan College—Commercial department.
- Nashville—Walden University (colored)—Commercial department.

Texas:
- Abilene—Simmons College—Shorthand, typewriting, and bookkeeping.
- Austin—University of Texas—School of business training.
- Belton—Baylor Female College—Bookkeeping and shorthand department.
- Brownwood—Howard Payne College—Business department.
- Fort Worth—Texas Christian University—College of business.
- San Antonio—St. Louis College—(No separate department).
- Tehuacana—Westminster College—Commercial department.

Utah:
- Logan—Agricultural College of Utah—School of commerce.

Vermont:
- Burlington—University of Vermont—Department of commerce and economics.

Virginia:
- Abingdon—Martha Washington College—Commercial school.
- Abingdon—Stonewall Jackson Institute—Business department.
- Bridgewater—Bridgewater College—Commercial department.
- Lexington—Washington and Lee University—School of commerce.
- Manassas—Eastern College—School of commerce and finance.
- Richmond—Virginia Union University (colored)—(No separate department).
- Roanoke—Virginia College—(No separate department).
- Salem—Roanoke College—Commercial courses.

Washington:
- Pullman—State College of Washington—Commercial course.
- Spokane—Gonzaga University—Commercial course.
- Spokane—Spokane College—Commercial department.
- Tacoma—University of Puget Sound—School of commerce.

West Virginia:
- Bethany—Bethany College—Commercial department.
- Buckhannon—West Virginia Wesleyan College—School of commerce and administration.
- Charlestown—Powhatan College—Commercial department.
- Elkins—Davis and Elkins College—Commercial department.
- Morgantown—West Virginia University—Commercial course.

Wisconsin:
- Madison—University of Wisconsin—Commercial course.
- Milwaukee—Marquette University—College of economics.
- Watertown—Northwestern College—Business department.

Wyoming:
- Laramie—University of Wyoming—Department of commerce.

COMMERCIAL EDUCATION FOSTERED BY PRIVATE CORPORATIONS.

Another form which commercial education has taken, and which promises to provide a very large part of all the commercial education in the country is that given by the various industrial enterprises as part of their apprentice systems and welfare work. Late in September, 1912, Dr. Lee Galloway, of New York University, with representatives of some of the large industries, began a movement for the formation of the National Association of Corporation Schools. The first meeting was held at New York University in January, 1913, and a large convention was held in Dayton, Ohio, under the auspices of the National Cash Register Co., in September, 1913. The avowed purpose of this association is to increase the efficiency of the individual employee, to increase the efficiency in industry, and to influence the courses of established educational institutions more favorably toward industry. The association consists of about 100 members representing all forms of industry in all parts of the country.

EXTENSION WORK IN COMMERCIAL SUBJECTS.

Finally we must take some notice of the work of correspondence school and collegiate extension divisions of universities.

The University of Wisconsin has established its extension departments in every part of the city of Minneapolis, and is doing the same thing throughout the State. Even the privately endowed universities in the East are establishing branches, which are usually known as "extramural divisions," in various parts of the country. The movement everywhere is to serve the people. Private enterprises for teaching commercial subjects by mail have gained great headway, one reporting an enrollment of over 15,000 students, including in this list men in all ranks of business, from the lowest to the highest.

CONCLUSION.

In conclusion we ought to say something of the tendency to make a clear distinction between commercial education and industrial education. There has been a confusion of terms in this subject, due largely to the fact that manual training schools and commercial departments have been established in ordinary high schools. The work in Cincinnati and the work of the National Association of Corporation Schools have done much to make clear the distinction between these two lines of educational work.

We have made a survey of the work of boards of trade and chambers of commerce to discover what concise and well-directed support is given by these associations to educational institutions. There have been some sporadic attempts on the part of chambers of commerce and boards of trade to give assistance, but very little has been done on the average. We are still far behind the various chambers of commerce in Europe in this respect. In its most recent report the London Chamber of Commerce says:

> But the London Chamber of Commerce has been bold enough to educate the educators. Prior to 1886 there did not exist in this country any organized and specialized system for teaching youth destined to adopt a commercial career. The greatest commercial center in the world was doing nothing by way of education to correspond with what for years had been done in almost every competitive city on the Continent. The first step was a small one. In 1886 the textile trade section of the chamber initiated special classes, prizes, and certificates to encourage youths already engaged in the textile trades to render themselves efficient in modern foreign languages, in bookkeeping and in shorthand. This was followed by conferences with headmasters and educationists—a notable one being held at the Guildhall, under the presidency of Sir Albert K. Rollit, who was and is now the chairman of the commercial education committee—the appointment of a representative committee of pedagogues and public men, which in turn consulted with the Oxford and Cambridge examinations board, the College of Preceptors, the City and Guilds of London Institute, and others. A scheme for junior commercial education resulted, which was roundly condemned by many schoolmasters as calling for too high a standard, although falling below the level,

in its requirements, of the curricula common on the Continent. It would be too tedious a task to follow subsequent developments step by step, but in 1890 the chamber held its first examination for junior commercial certificates. Only 67 candidates presented themselves, and only 17 secured a pass. Notwithstanding this meager result, all temptations to lower the standard of proficiency were resisted. In 1894 a senior commercial certificate examination was instituted, which attracted only 17 candidates, of whom 4 only were successful. Results fluctuated greatly for the next six years. With the introduction of examinations for junior commercial certificates in separate subjects in 1901, however, an extraordinary progressive movement set in. In 1910, 107 full junior and 443 senior commercial certificates had been awarded; by 1904 the junior passes had risen to 1,350 and the senior to 1,198; whilst at the examinations held in the spring of 1910, 7,230 junior and 3,976 senior candidates presented themselves. When the movement started, commercial textbooks were rare—now they are plentiful—and there was no such encouragement as is now afforded by scholarships for prolonging study in modern foreign languages. Last, but not least, there did not exist, as there do now, lists of employers and companies who are willing to give a preference in filling up vacancies in their establishments to holders of commercial certificates. This means that within the spheres of the 233 centers in which examinations are now held, the holders of the chamber's certificates, numbering 34,572 to date, are privileged in obtaining employment. I opened my reference to this subject by stating that the chamber was bold enough to educate the educators. Classes in branches of commercial knowledge are now spread throughout the primary and secondary schools of the Kingdom, and the chamber examines for teacher's diplomas, 985 having been awarded from 1905 to date.

Business men in the large cities are wide-awake to the opportunities, and probably next year will be marked by fuller cooperation between business associations and local commercial educational institutions.

Two important conventions were held during the year on the subject of commercial education, one under the auspices of the Efficiency Society in Boston, and the other under the auspices of the Western Economic Society. A complete account of the former convention will be found in volume 1 of the Transactions of the Efficiency Society, and of the latter in the Journal of Political Economy for January and February, 1913.

CHAPTER XI.

PROGRESS IN VOCATIONAL EDUCATION.

By William T. Bawden.

Managing Editor of "Vocational Education."

Contents.—Vocational education surveys—National society for the promotion of industrial education—Vocational guidance—National education association—National association of corporation schools—Training of teachers for vocational education—Legislation—State systems of vocational education—Industrial education under State supervision in Pennsylvania.

VOCATIONAL EDUCATION SURVEYS.

One of the first things to be noted in a review of recent progress in vocational education in the United States is the gradual subsidence of the clamor for immediate action based on the experience of other countries, or for launching ambitious educational enterprises preceded by nothing but office study and paper preparation. The programs of educational conventions continue to give unmistakable evidence of the widespread interest in vocational education, but they are less and less cumbered with the details of schemes that have been developed to meet the special problems of some environment other than that in which the conferees are interested or with which they are acquainted.

On the contrary, Commonwealths and communities in increasing numbers are turning their attention and their energies to self-study. *Survey* is rapidly usurping the place of *efficiency* as the most popular word of the hour, and in its turn bids fair to be associated with excesses of various kinds in the characteristic American way. Nevertheless an immense amount of good is accomplished in many places through this community study, and as a method of arriving at results it is so vastly superior to the plan of appropriating bodily a system that has been evolved to meet foreign conditions, that it is probably not too much to characterize it as the most significant phase of the vocational education movement during the past year.

The importance of the survey as a factor in recent progress in vocational education may be suggested by noting briefly a few of those that have been undertaken or are projected.

New Orleans.—An investigation has been undertaken by the department of educational research, recently created by the board of

education, for the purpose of developing plans for vocational education for that city. The immediate occasion for the study is an appropriation for this purpose of $2,000 from the funds made available by the bequest of Isaac Delgado, who left $1,000,000 for founding a trade school for boys. Dr. David Spence Hill, of Tulane University, is in charge of the investigation. The board of education has already established a trade school for girls, providing a new building at an expense of approximately $80,000. It is expected that the Delgado fund will provide $250,000 for buildings and equipment.

New York City.—The New York school inquiry, which has attracted attention all over the country, included in its scope some attention to the problems of vocational education. The constructive suggestions, if carried out, would greatly increase the opportunities for training available to children in that city.

The New York City board of education has appointed a special committee to arrange with the permanent census board for an investigation which will reveal the exact number of employed children in the city, and the nature and advantages of their occupations.

Bridgeport, Conn.—During the past year an educational survey has been made by the board of education, under the direction of Supt. J. H. Van Sickle, of Springfield, Mass. The report includes recommendations providing for a comprehensive scheme of industrial and household arts education suited to the needs of the community.

Rochester, N. Y.—The chamber of commerce and the board of education, in cooperation, have instituted a study of local industries, under the direction of George Keople, for the purpose of determining the lines along which further developments in vocational education shall take place.

Buffalo, N. Y.—Plans are developing, and considerable field work has been actually done, looking toward a comprehensive industrial education survey. It is to involve a careful study of the problem of vocational guidance, as well as that of vocational training. The cooperating interests are the chamber of commerce, the board of education, and the Young Men's Christian Association. Numerous conferences have been held, in consultation with E. W. Weaver, of Brooklyn, N. Y., and others.

Duquesne, Pa.—The local Young Men's Christian Association, in cooperation with the central department, Pittsburgh, conducted an investigation during the summer of 1913 for the purpose of developing courses for workers and apprentices.

Cincinnati.—The chamber of commerce has taken the initiative in planning for a thorough educational and industrial investigation in that city. The United States Department of Labor has been requested to send a representative to counsel with the local authorities. The following agencies have been invited to cooperate: Board

of education, Schmidlapp bureau, bureau of municipal research, and bureau of vocational guidance. The work is to be prosecuted under the direction of a general committee, which is to contain representatives of all of these interested organizations as well as representatives of employers and workingmen.

Grand Rapids, Mich.—As one of the practical outcomes of the convention of the National Society for the Promotion of Industrial Education, a survey is making of the conditions of employment of women and girls in local industries. This study is under the direction of Miss Cleo Murtland, assistant secretary of the society.

Richmond, Va.—The board of education is planning an industrial education survey, to be carried out under the direction of Supt. J. A. C. Chandler.

Topeka, Kans.—The board of education and the chamber of commerce are planning to cooperate in a survey of the industries of the city, under the direction of Supt. H. B. Wilson.

St. Louis.—At the suggestion of Supt. Ben Blewett, the business men's league is considering the advisability of an industrial and educational survey.

New York City.—The public education association, in cooperation with the board of education, has been conducting a thorough investigation into the conditions of employment in the building trades in the city, under the direction of Miss Alice Barrows. Attention is given to the problems of both vocational guidance and vocational training.

Boston.—One of the most complete studies that has yet been made in any city is that undertaken by the committee on opportunities for vocational training of the Women's Municipal League. The plan included: (1) A series of maps showing the distribution of educational agencies and resources; (2) a directory of these agencies for individual and community use, which should be kept constantly revised and up to date; (3) reports upon the character and scope of the work offered by these institutions; (4) constructive suggestions looking toward effective cooperation. The investigation resulted in the publication of a valuable "Handbook of Opportunities for Vocational Training in Boston."

Sioux City, Iowa.—The preliminary steps have been taken to secure the cooperation of as many interests as possible in an investigation to determine the educational needs of young people employed in the local industries.

Minneapolis.—A fund contributed by a citizen whose identity has not been made public is used to defray the expenses of a commission which is making a special study of vocational education in this country and Europe. The commission is made up of three members of the board of education and the assistant superintendent of

schools. It is expected that the commission will draw up plans for an adequate system of vocational schools.

NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION.

Through its board of managers and executive committee the National Society for the Promotion of Industrial Education is continuing to make itself felt as a positive force in the movement. It is without doubt a very strong factor in the progress of vocational education. By means of the publication and distribution of valuable bulletins, an extensive correspondence, and the personal efforts of representatives, it is conducting a propaganda of far-reaching influence.

In ways that are not apparent to the casual observer the society has been of great usefulness in the preliminary shaping of legislation, and in the matter of counsel and suggestion in the numerous investigations, referred to elsewhere, that are now being conducted by communities in various parts of the United States.

The society's latest convention was held at Grand Rapids, Mich., in October, 1913. It was notable in at least three respects: First, for a new emphasis upon and a new impetus to the discussion of the kinds of vocational training that should be provided for women and girls; second, it was the occasion of the distribution of three important bulletins; and, third, the program included a summary of the progressive work that is accomplished in a number of typical centers.

VOCATIONAL TRAINING FOR WOMEN AND GIRLS.

Two dominant notes characterized the program of the session devoted to this phase of the work; the first was the importance of the home and the need of specific training for its management, and the other was the dignity of labor and the need of the training of women and girls for efficiency in the industrial world.

The discussion covered the entire field of housekeeping and the home, on the one side, taking in its relation to the commercial, industrial, economic, hygienic, educational, moral, and ethical departments of life. Housekeeping was presented as a big, vital, progressive enterprise, requiring as much skill in the administration of its affairs as a manufacturing plant or a business undertaking. On the other side, there was a very comprehensive treatment of plans for women's work in preparation for self-supporting occupation in industry and the home.

SPECIAL SECRETARY FOR WOMEN'S WORK.

Much enthusiasm was manifested at the first public appearance of a secretary whose special interest is to be the development of work for women and girls. More than a year ago the board of managers of the society created a committee whose duty it was to devise ways and means to further the interests of women and girls in this field, and thus to round out and complete the work of the society, which hitherto had been giving attention more particularly to the problems of vocational training for boys. This committee held several important and protracted conferences at the time of the Philadelphia convention in 1912, and presented to the board of managers a plan and recommendations calling for the appointment of a secretary who should give her entire time to these questions.

The executive committee, in its report to the board of managers, February 8, 1913, recommended the appointment of an assistant secretary "to make a special study of vocational training for women who are wishing to prepare for self-support and women who are already self-supporting, and to carry out the plans of a committee on women's work." The creation of a committee was also recommended, as well as steps to secure adequate representation of women on the board of managers. The recommendations were adopted, and a committee of nine members was appointed under the chairmanship of Miss Virginia Potter, former president of the board of managers that organized the Manhattan Trade School for Girls, New York, and maintained it for seven years before it became a part of the public-school system of the city.

THE SHORT UNIT COURSE.

The first of the three bulletins distributed at the Grand Rapids convention is one entitled "The Short Unit Course for Evening Trade Extension and Part-Time Trade Extension Schools." It is a pamphlet of 116 pages issued as Bulletin No. 17, consisting of three parts: I. Organization and administration of the short unit course; II. List of courses; III. Analysis of courses.

The bulletin was made the basis of the discussion on the topic: "How can the evening school best meet the needs of the wage worker?" The idea of the short unit course is by no means a recent discovery, as is indicated by the rather imposing list of teachers and directors upon whom the authors were able to draw in the compilation of this report. Nevertheless, the report is one of the most significant contributions of the past year in its analysis of the problems of the evening school and the adaptation of means to ends.

THE TRAINING AND CERTIFICATION OF TEACHERS.

Probably the most significant event of the Grand Rapids convention was the presentation on Saturday morning of the preliminary report of the "Committee on the selection and training of teachers for State-aided industrial schools for boys and men." The report is in the form of an 86-page bulletin. The following features attract attention:

The sole object of certification is to insure a wise selection of teachers for the service of the State. The present practice of selecting teachers by means of the written examination does not adequately measure the qualifications which vocational schools are demanding of their teachers. Methods involving more practical tests must be devised to supplement the written examination. Such tests should include credentials of various kinds as to trade ability and technical knowledge, supplemented by personal interviews and practical demonstrations. Examinations should be in the hands of the State, working in close cooperation with the local community. Certificates should be issued by the State and should be valid for one year, to be renewed only when the teacher is able to demonstrate his ability to teach his chosen subject efficiently.

The power of certification should lie with the State board of educational control as a part of its responsibility in the supervision of State-aided schools. The work of examination and certification should be conducted by the special committee to which the control of vocational schools is committed. Such examinations require entirely new machinery or radical modification of present machinery.

There is an increasing demand for vocational teachers. Existing institutions do not adequately train teachers for industrial work. Vocational teachers must have experience in the trades they teach. Colleges and normal schools can not give adequate trade training. Trade experience must be obtained by working in the trade before entering the training school. To give training for vocational teaching, new schemes are necessary.

Special evening training classes designed to deal with the problems of the industrial school and the application of the principles of teaching to such a school, limited in their membership to selected men in the trade and directed by men experienced in industrial school work, give promise of being the best source of immediate supply.

The intermediate technical school is one source to which we may look for teachers. Such schools should establish adequate training courses designed to train the student who has trade experience in the art of teaching his trade. Where normal schools attempt to train vocational teachers, special departments should be established for the purpose. Tradesmen will not forego earning power to take such training. As an aid to this work, scholarships should be granted by the State. Training classes in the various industrial and trade schools maintained by the State and taught by a traveling instructor especially equipped for the work offer a feasible plan. In every case, training in teaching and trade contact should continue after the teacher gains employment, through special training classes, and renewal of certificates to teach in State-aided schools should depend in part upon participation in such training.

CHAMBERS OF COMMERCE AND VOCATIONAL EDUCATION.

The third of the three bulletins to be distributed at the Grand Rapids convention is entitled, "What chambers of commerce can do for vocational education." Following is an outline of the definite suggestions presented in the 54-page pamphlet:

The following steps may be taken to further local effort in promoting vocational education:

(1) Establish a committee on vocational education as a part of the chamber of commerce organization; (2) arrange meetings to stir up local interest in vocational education; (3) preparation and publication of statements showing in detail the facilities for industrial and commercial education in the locality; (4) initiation and support of investigations as to the need of vocational schools; (5) aid in establishing advisory committees of business men; (6) aid in providing scholarships and rewards for further industrial or commercial work and experience outside of the schools; (7) establish a placement bureau for vocational school pupils; (8) interest young people in vocational efficiency through the formation of a younger division of the chamber of commerce.

The following ways are suggested of furthering State effort in promoting vocational education: (1) Keep track of proposed legislation; (2) conferences with various organizations that may or should be interested in vocational education; (3) obtain the establishment of a commission to study problems of vocational education as applied to the State; (4) urge the passage of laws making possible a State system of vocational education.

The bulletin also contains a summary of what chambers of commerce have done and are now doing for vocational education in different parts of the United States in the direction of influencing legislation, raising funds, supporting educational surveys, etc.

RECENT ACHIEVEMENTS IN TYPICAL CENTERS.

The third very real contribution of the national society consists in focusing attention at its annual conventions upon actual achievements, thus making the experience of one center available over as wide an area as possible. Reference may be made here to two of the addresses presented at Grand Rapids.

The problems of the development of schemes for industrial education in the small city were very well brought out in one of the discussions. While in certain respects these problems are easier to handle in the small city, there are certain difficulties that are due to the very fact of the limitations of size. In a city as large as Detroit, for example, after some months of planning and effort, there has been developed a scheme of part-time education involving the cooperation of about 20 manufacturers. At that rate Kalamazoo might expect to be able to enlist the cooperation of two concerns. It can be readily seen that, under such conditions, it would not be easy to bring together in the smaller city prospective pupils in large enough groups to secure anything like the maximum of efficiency.

On the other hand, there are many problems encountered in the large city that do not arise in the small one. The results of the Chicago experiments are especially suggestive to other cities because of the working agreements which have been brought about between the labor unions and employers in the effort to solve the problem of apprentice training. One illustration must suffice:

After experimenting with evening classes for two seasons, and demonstrating that that plan can not fully meet the situation, plans

were developed through conferences for the organization of day classes designed to provide the kinds of instruction needed by apprentices in certain selected occupations. In September, 1912, for example, an agreement was effected between the union and the officers of the Electrical Contractors' Association, whereby the union passed an order requiring the attendance of all apprentices at the day classes provided for one-half day of each week, while the employers agree that apprentices should be paid for the time spent in school at their regular rate of pay, provided that this amount did not exceed $1. Following is the agreement ratified by the union and by the Electrical Contractors' Association:

It shall be compulsory upon apprentices to attend school at least one-half day each week during the school term, and the employer will pay apprentice for such time up to $1 per week. The union shall furnish the apprentices with necessary textbooks free of charge, and shall also provide each apprentice with a card which must be presented to the instructor at the school and signed by him each week, to show that apprentice was in attendance; and this must be shown by the apprentice to the foreman or employer on request.

VOCATIONAL GUIDANCE.

No discussion of progress in vocational education would be complete without consideration of the intimately related subject of vocational guidance. In this field of effort events have moved more swiftly, if that be possible, than in industrial education. A short time ago it could hardly be said that there was any such thing as vocational guidance as a conscious social aim. At least, it did not exist in any organized and efficient form. To-day, however, vocational education and vocational guidance are rapidly coming to be recognized as two phases of one vast problem.

The present status of the movement may, perhaps, be briefly summarized as follows: Not so very long ago vocational guidance meant finding a job for the individual in some industry, and it was regarded as a comparatively simple matter.

As men and women have studied these problems, however, they have discovered that here is an immense field, challenging the most thorough investigation, and offering almost unlimited opportunities for the application of scientific method and skill. The effort to find employment for boys and girls has been largely transformed into an effort to keep the boys and girls out of the industries, by convincing them and their parents of the value of further schooling, at least until there is available a fund of more definite knowledge of the industries into which it is proposed to send the children.

There are several distinct problems recognized in this general field of vocational guidance: (1) There are still those who believe the problem to be one mainly of guiding individual boys and girls into

suitable employment. (2) There are those who believe that, in the present state of general ignorance, those most in need of vocational guidance are the teachers and parents, who are themselves supposed to be the sources of advice. (3) There can be no doubt that the industries need to be carefully and systematically studied, to the end that vocational counselors may know as accurately and fully as possible the conditions into which they send the boys and girls. It is believed that many industries must be greatly modified before any organized agency can assume responsibility for the employment of children in them. (4) Many believe that employers, as a class, are as much in need of vocational enlightenment as any of the others involved. (5) Finally, there are those to whom vocational guidance means the impartial distribution of advice and suggestion to children, parents, teachers, employers, and the industries.

The Grand Rapids convention contributed an important step forward in perfecting the organization of the National Vocational Guidance Association. A meeting for this purpose was held during the three days immediately preceding the convention of the National Society for the Promotion of Industrial Education.

A practical object lesson that proved to be of great constructive assistance to the delegates present was afforded by a conference on vocational guidance, held in the auditorium of the Central High School, followed by an organized inspection of the work in vocational guidance in this school and in the junior high school. The topics on the program, presented by high-school pupils, included: "The work of the junior association of commerce," "Student activities and social efficiency," and "Training for leadership." The subjects for discussion in the classes visited included: "Vocational ambition," "The value of education," "Study of vocations," "Vocational biography," "Choosing a vocation," "Preparation for vocation," "Vocational ethics," etc.

The present trend of vocational guidance was summarized from another point of view by one of the speakers on the convention program as follows: (1) The work began originally with the attention given to various types of misfits in the social settlements. It was based on what might be characterized as a "niche" theory of society, which states the problem as that of finding the particular place or station in life that exists somewhere for each individual. (2) In the second stage it was held to be the duty of society to tinker with, and in some way to patch up, individuals that are defective. (3) The idea was conceived of working through the public schools to prevent individuals from being spoiled in the making. (4) Next came a shift in emphasis to the necessity of vocational training. (5) And finally we have come to a recognition of the necessity for an educational survey

of the community in order to determine and to make known the facilities and opportunities that are already available, and for a survey of the industries in order to determine what the real needs are. The present tendency undoubtedly is to seek to utilize the public school system as the agency for the prosecution of the work, looking toward the solution of these great problems.

NATIONAL EDUCATION ASSOCIATION.

For several years past the National Education Association has manifested a lively interest in the problems of vocational education, as may be seen from the amount of space in its programs devoted to the discussion of related topics and from the number of committees which have been at work under the direction of various departments. The importance of these problems was recognized in a more definite and official way at the Chicago meeting, July, 1912, by the appointment of a committee on vocational education and vocational guidance, with a preliminary appropriation of $500. The chairman of this committee is Robert J. Fuller, superintendent of public schools, North Attleboro, Mass.

A preliminary report in the form of a 32-page pamphlet was presented at the 1913 convention in Salt Lake City, which contained suggestions as to the field to be covered by the work of the committee, a series of questions and issues to be discussed, and an outline indicating the scope and possibilities of the work involved in any comprehensive study of the questions of vocational education and vocational guidance for persons between the ages of 14 and 18 years.

It is proposed that the final report shall take the form of a handbook of information for the use of those who are interested in adopting some plan of vocational education and vocational guidance; that it shall contain also a discussion and presentation of plans for the certification and training of teachers for vocational education; that it shall include an acceptance of principles and policies already prepared upon vocational education and vocational guidance, together with a statement of such additional principles and policies as new conditions and needs may demand; and that it shall add warnings, as well as constructive suggestions, concerning what needs to be done and what needs to be avoided to make the work successful in any given community.

A subcommittee was created, under the chairmanship of Meyer Bloomfield, secretary of the Boston Vocational Bureau, to make a special study of the problems of vocational guidance. This subcommittee is to prepare a report which will become a part of the report made to the association by the general committee.

NATIONAL ASSOCIATION OF CORPORATION SCHOOLS.

Another important factor in the progress of the movement is the National Association of Corporation Schools, which held its first annual convention at Dayton, Ohio, in September, 1913. A large attendance, a vigorous executive committee, an aggressive policy, and a four days' program crowded with live discussions, attest the high hopes for vocational education as one means of contributing to the amelioration of conditions and to the solution of certain perplexing social problems. The avowed purpose of this organization is to provide a means for the interchange of ideas and experience, and through this interchange to prevent, if possible, costly mistakes in the planning and administration of new schools.

The demand for skilled labor is becoming more insistent every day. In attempting to meet that demand employers of labor have themselves established apprenticeship schools and cooperative courses, the latter arranged in connection with schools of general education. From the manufacturing and trade point of view the apprenticeship school is almost ideal, but such schools are as a rule possible only for concerns operating on a large scale. It is possible that one of these two forms of vocational education will prove to be that ideal form which the public is seeking—the form which shall conserve the best interests of each individual and of all classes of people.

Although the much-lamented old-time apprenticeship system, by which an apprentice learned a trade from top to bottom in a comparatively small shop, has become a thing of the past, apprenticeship has never entirely died out. It has become almost a dead letter in many occupations, however, since apprentices in actual practice, if not in theory, have been restricted to work involving only one or two operations for long periods instead of learning a trade as a whole. This condition has been due, of course, to the rapid development of industry in an era of specialization. Now manufacturers are finding that the young men of the new generation are not prepared for advancement in their trade, and are not prepared to become foremen. They are therefore considering the necessity of changing their policy of extreme specialization, and are beginning to revise their apprenticeship system so that the apprentice may receive a complete trade training, and with it such academic instruction as will further his advancement and, in addition, promote higher ideals of citizenship.

In planning systems of instruction it has been found that evening continuation classes, while practicable for the older men, are not advisable for the younger employees from the health standpoint. For them day schools are looked upon as the best solution. The apprenticeship schools differ in time allowances, in supervision and methods of instruction, in subject matter, and in compensation for class time.

THE BROWN & SHARPE SCHOOL, PROVIDENCE.

The vocational school maintained by the Browne & Sharpe Manufacturing Company, Providence, R. I., may be considered as typical of the plans which are developed by the companies which make up the membership of the National Association of Corporation Schools. This concern has had an apprenticeship system in its shops for over 50 years, and considers it "one of the very corner stones on which its prosperity and permanence rest." The aim of this apprenticeship system, with its school of instruction, is to make skilled machinists, and while the course fits also for foremanships and other lines of advancement, the company feels that the greatest need of to-day is for skilled workmen, and that any course of instruction leading away from supplying this need is not rightly directed. Many officials of the company, however, have risen from the ranks of the apprentices. It is stated that in 1904 there were 40 officials of the company who had begun as apprentices.

A foreman, or supervisor, of apprentices gives the school instruction and assists the shop foremen in giving the shop practice. In addition, he looks after the general welfare of the boys in a very intimate and personal way. He keeps in touch with the apprentices outside of working hours, and takes an interest in their social and moral life. Lectures, clubs, evening classes, and social features are arranged for their benefit.

The company's requirements of candidates for apprenticeship are higher than those which prevail in some other establishments. The boys must be grammar-school graduates, and must be at least 16 years of age. They must pay $50 to the company at the beginning of their period of apprenticeship for the privilege of learning the trade. At the close of the period, however, in consideration of faithful service, the apprentices receive a cash bonus of $150 each.

The apprenticeship school has been in operation for five years. The 150 apprentices in attendance are divided into groups of 18 for class work. The instruction is conducted mainly without textbooks and by direct means, working from the particular problem and its solution up to the principle. Practical problems are taken up as they would occur in the shop. Such reference books and tables are at hand as any progressive mechanic should have, and the students are taught to use them in solving the problems. These problems are worked out in blue-print form, and the sheets are preserved by the boys in suitable covers. At the close of the course this collection of sheets forms a valuable reference book for future use. The blue prints follow a careful gradation in the difficulty of the problems, and the directions given are explicit.

OTHER CORPORATION SCHOOLS.

There are a number of other important schools that ought to receive attention under this heading, but lack of space forbids more than the briefest mention. One of the pioneers in this field is the firm of R. Hoe & Co., New York, manufacturers of printing presses and machinery, which has had a school for apprentices in continuous operation for over 40 years. The apprenticeship school of the Lakeside Press, Chicago, and the course of instruction maintained by the International Typographical Union, with headquarters at Chicago, are types of progressive schools in this industry. In the field of electricity there are schools in connection with the plants of the General Electric Co., the Western Electric Co., the Westinghouse interests, and others. The International Harvester Co., the Fore River Shipbuilding Co., the American Locomotive Co., the Cadillac Motor Car Co., the Pennsylvania Railroad system, are instances selected to indicate the wide range of the industries that are drawn into the movement in a vital way.

TRAINING OF TEACHERS FOR VOCATIONAL EDUCATION.

One of the chief obstacles in the way of the rapid development of vocational education at the present time is the total inadequacy of the supply of teachers having the necessary training and qualifications. This lack of teachers has been apparent for some time, and, indeed, it was foreseen and predicted long before it manifested itself, but the efforts to prepare to meet it have not thus far developed on a scale large enough to exert much influence on the situation. The unusual combination of expert knowledge of the craft and teaching skill is not easy to secure. The traditional salaries assumed to be ample compensation for the school-teacher do not offer any inducement to the high-grade mechanic, who can hardly be expected to undergo a period of special training and preparation in order to enter as a missionary upon a field of work at a lower wage than he can earn in the shop. There are indications, however, that the necessary readjustment in salaries is already under way. The example already set by numerous boards of education, in determining to pay whatever is necessary in order to insure fully qualified leadership, will exert more real influence than hours of discussion and many pages of theorizing.

In response to these evidences of the demand already existing for properly qualified teachers at a fair remuneration, a number of institutions have organized special classes for the accommodation of men who are regularly employed at the trades which it is proposed to train them to teach. By holding these classes in the evenings, it is possible for the men to avail themselves of the training without sacrificing their status as wage earners; and by arranging for a limited

amount of practice teaching in the same way, it is possible to facilitate the transition from the shop position to the school position, and to arrange for the elimination without violence or shock of those who are manifestly unfitted for the work of teaching.

During the past year special classes of the kind referred to have been organized in the following institutions: Teachers College, Columbia University, New York; Pratt Institute, Brooklyn, N. Y.; State Normal College, Albany, N. Y.; State Normal School, Buffalo, N. Y., and others. A brief account of the work at Albany must suffice as an illustration of the methods employed in these classes.

For two years this school had received calls for men trained to teach specific trades. A one-year course had been maintained for this purpose, but only one man each year had availed himself of the opportunity. In the light of this experience it was determined to establish a night school to care for the demand. The number was limited to 15 men and to four trades: Patternmakers, cabinetmakers or carpenters, machinists, and general metal workers. Not less than five years' experience at the trade, in addition to apprenticeship, was required of candidates for admission to the training course. A full number for the class was soon selected from a large number of applicants, each after a personal interview with the director of the work, after having been recommended by the superintendents or managers of the various shops interested. The members of the class proved to be of a rather superior class of shop men, with an average trade experience of 12 years.

The class met on Tuesday and Thursday evenings, from 7 to 9.30, the term being 40 weeks in length. The work was divided into four subjects: Shopwork, drawing, shop mathematics, and the principles of teaching. In the shopwork the only general information given in the trades was in the direction of some special classes of work which the men had not been able to get in their trade experience. For example, a machinist may have worked many years in a shop and never have used a milling machine. Such a man was put on the milling machine and thoroughly taught its principles and uses.

The main object of the shopwork was to show the men by example how to treat students in a trade school. The men assumed the attitude of green apprentices, and the instructors presented the work by the same methods that would be used with classes of boys. In general the idea was to create for the men the atmosphere of a trade school, with their own skill as a background on which to work, and in this way to allow them to absorb, as far as possible, the spirit of a good teacher.

The only academic work introduced was that in the principles of teaching. In this course were discussed the necessity for careful outlines, the principles of laying out work, courses of study, equip-

ment, the correlation between the different parts of a school, prices of materials, class recitations and examinations, records and efficiency cards, and other practical details of the teacher's work. No attempt was made to go deeply into the philosophy of the subject, only such facts being studied as are necessary for any man who expects to impart information.

LEGISLATION.

The subject of legislation for vocational education for the current year was fully treated in the last report in the form of a forecast.[1] In Washington, D. C., in connection with the so-called Page bill and Lever bill passed by the Senate and House, respectively, and in the Illinois State Legislature, the situation resulted in a deadlock, chiefly because of the inability of the zealous friends of vocational education to agree on the fundamental principles that should be embodied in the laws. With these exceptions, practically all of the legislation referred to was subsequently enacted, and as the proposed laws have been outlined in detail with respect to their main provisions, they are not repeated here.

California.—A State board of education has been established and authorized to appoint three deputies to assist the State superintendent. One of these deputies is to have charge of industrial and household arts education. The law does not provide for State aid for vocational education.

Connecticut.—The act of 1909, establishing a system of State trade schools, has been modified so as to provide State aid up to a limit of $10,000 for vocational schools organized and maintained under local initiative. A trade school at New Haven has already been organized under the provisions of the new law.

STATE SYSTEMS OF VOCATIONAL EDUCATION.

Six States now have in operation definite systems for organizing and supervising vocational schools and for assisting local communities in the maintenance of such schools through grants of State aid. Specific machinery for the administration of these systems has been established, in each case under the direction of a special deputy, or expert assistant, attached to the staff of the State superintendent or commissioner of education. These States are Massachusetts, New York, New Jersey, Pennsylvania, Wisconsin, and Indiana.

The following summary, based on reports received from the offices of the State departments of public instruction, is a brief review of the progress that has been made during the past year in the administration of State aid for vocational education.

[1] See ch. 10. Progress in Vocational Education. Rept. of Commis. of Ed., 1912, vol. 1, especially pp. 282–287.

MASSACHUSETTS.

New legislation.—Continuation-school law, chapter 805 of the acts of 1913.

The salient features of this law are: This act is permissive; communities may establish these schools, but are not required to do so. Schools are for minors between 14 and 16 years of age who are regularly employed not less than six hours per day. With the consent of the State board of education school committees may require attendance in these schools of all minors securing employment certificates who are not otherwise receiving instruction approved by them as equivalent to that provided in the continuation schools established.

Attendance at these schools shall be at the rate of not less than four hours per week and shall be between the hours of 8 o'clock in the morning and 6 o'clock in the afternoon of any working day. The time spent in the continuation school or class shall be reckoned as a part of the number of hours that minors are permitted by law to work.

So long as continuation schools are approved by the State board of education the municipalities maintaining them shall be reimbursed to the extent of one-half the cost of maintaining them.

Employers of minors of the group affected are required to permit attendance upon and may not employ minors who do not attend these schools. A penalty is attached to violation of this requirement.

Chapter 779, acts of 1913, requires children 14 to 16 years of age to be either in school or at work. It is in this respect supplementary to chapter 805.

Chapter 832, acts of 1913, places teachers in State-aided vocational schools in list of teachers who may avail themselves of the State pension law for teachers.

By chapters 566 and 587 of the acts of 1912 two county agricultural schools were established, one in Essex County, at Danvers, and the other in Bristol County, at Segreganset.

New appointment.—Robert Orange Small was appointed deputy commissioner of education in charge of vocational education, August 1, 1913.

New work.—The greatest development of the year in new work has been that of the evening courses in practical arts and homemaking for women authorized under chapter 106 of the acts of 1912. During the past year courses have been opened in this work in 17 cities and towns in over 40 centers.

In the classes in day schools for instruction of girls in home making, cooperative work between the home and the school, in which the practical home work has been definitely correlated with the school, has been a feature developed to some extent.

The short unit course, designed to serve the specific needs of a small group of skilled workers and limited to a period of 5 to 10 weeks, has been a feature in the trade extension work of the evening schools.

At Hyannis during the first week of July, 1913, there was held a summer institute organized and conducted by the agent in charge of vocational work for men and boys, with the cooperation of committees from the principals and teachers. This institute was for the benefit of teachers employed in the State-aided vocational schools and was attended by 150 persons. It was a very profitable affair and will be continued as an annual institute.

The whole trend of industrial schools in this State is toward more definite and direct vocational education. The measure of the success of the schools is their ability to train for skilled industries and for citizenship.

NEW YORK.

The progress of vocational education in the State of New York during the past year has demonstrated that vocational instruction is not only a question of establishing a new branch in the old-school system, but it involves the whole purpose of our public-school system. The demand of the hour is no longer solely that the children shall be taught craftsmanship, but that the entire theory and practice of public education shall be overhauled with a view of fitting it to the needs of the democracy.

New legislation.—During the past year New York amended its education law to provide for State-aided evening vocational schools, and part-time or continuation schools, as well as to extend the amount of aid given to vocational instruction. The agitation for this increased aid was based upon the proposition that the need for vocational instruction within the State was great and imminent, that in view of the expense involved and the problems to be solved State support and cooperation were necessary. Furthermore, in view of the issues at stake and difficulties to be encountered, allotments of State money should be made under conditions which prevent it being wasted or misapplied and yet guarantee local rather than State control and administration.

Bulletin.—An important bulletin was issued dealing with the rules and regulations of the commissioner of education with reference to certain fundamental principles which must underlie the establishment and operation of State-aided vocational education. The spirit and purpose behind these definite plans and policies were based upon the theory that the local community and the State had entered into a joint partnership for the purpose of securing an effective scheme for vocational training such as would justify State aid under the law.

It has been determined that in order to give State aid to part-time continuation schools, the pupils must be regularly and lawfully employed during part of the day in useful employment or service, and the subject taught must be supplementary to the practical work carried on in such employment or service.

In the case of evening vocational schools, it has been determined that State-aided vocational instruction shall include that which is given in the trades and in industrial, agricultural, and home-making subjects which are open to pupils over 16 years of age who are regularly and lawfully employed during the day, the said instruction to be in subjects related to the practical work carried on in such employment. However, such evening vocational school providing instruction in home making shall be open to all women over 16 years of age who are employed in any capacity during the day. The State has drawn a sharp distinction between the general evening school supported entirely by the local community and the State-aided evening vocational school supported jointly by the community and the State.

The year has been marked by actual developments, not only by new types of instruction, but by increased efficiency in all types of vocational instruction. The beginning has been made in placing on a firmer foundation the selection and training of teachers for State-aided vocational schools. Pratt Institute has established a course for training, through evening instruction, mechanics who are employed during the day, fitting them for the special demands of vocational schools. The State Normal College at Albany, and the Buffalo Normal School have evening courses fitting employed men to become teachers. The idea of giving short unit courses in evening trade extension and part-time trade extension schools, in place of the more general industrial work as formerly conducted by these schools, has made great progress.

Trade cooperation.—An interesting agreement has been drawn up between the Rochester Typothetæ and the Rochester Shop School whereby the term of apprenticeship in the printing trade shall be four years. Three months shall consist of a preliminary or try-out course at the public printing school, and upon completing this preliminary course the pupil may enter the employ of some printing plant as an apprentice. The apprentice shall alternate weekly between the shop school and the printing plant and receive from the employer a weekly wage, the employer to pay wages for the school time as well as the shop time

NEW JERSEY.

Legislation.—The legislature of 1913 passed a law known as the vocational school law, which provides State aid for districts setting up vocational schools or departments in (1) industrial, (2) agricultural,

or (3) household arts education. These schools may be all-day, part-time, or continuation schools, or evening schools. The amount of State aid given may be a maximum of $10,000 for each school. Under the provisions of this law vocational schools have already been established in Newark, Jersey City, Bayonne, Passaic, and Atlantic City. There are now in operation in New Jersey the following types of industrial schools organized under this law:

(1) All-day industrial schools for boys over 14.
(2) All-day household arts schools for girls over 14.
(3) Part-time or continuation day schools for boys over 14, regularly employed as apprentices.
(4) Evening industrial classes for boys or girls over 16, employed as apprentices.
(5) Evening household arts classes for girls over 17.
(6) Short unit courses. These courses offer in a few lessons instruction to workers who wish some specific help. For example, Passaic is offering several short unit courses for textile workers. One of these is a course in *textile calculations in cloth analysis*, and is given for a period of six nights.

Appointment.—The general school law of New Jersey provides that four assistant commissioners of education shall be appointed, one of whom shall have charge of vocational education, including agriculture. In January, 1913, Dr. Calvin N. Kendall, commissioner of education, appointed Lewis H. Carris to have charge of the industrial department.

Bulletin.—The State department of public instruction has issued two bulletins during the year. Bulletin No. 1, *State-Aided Vocational Schools*, gives a brief description of how these schools can be organized, the kinds of schools possible, the classifications of teachers, and the text of the law. Bulletin No. 2, *The Short Unit Course*, is a reprint of a bulletin of similar title recently issued by the National Society for the Promotion of Industrial Education.

The fact that New Jersey has had State aid for manual training for so many years, and that any district may receive State aid to the amount of $5,000 in the introduction and maintenance of any form of manual training, has brought about in many places work under this designation which approximates vocational education. The amount of State aid given to manual training during the past school year was $190,000.

PENNSYLVANIA.

Legislation.—The general assembly in May, 1913, passed a vocational education law. Prior to this time no provisions had been made for vocational education, except in a very general way by the school code of 1911, and no money had been appropriated to aid the

districts maintaining vocational schools. The act of 1913 set up a definite State system of vocational education which is fundamentally the same as the New York, New Jersey, Indiana, and Massachusetts systems.

The general assembly also appropriated $140,000 to assist the various districts which would establish and maintain vocational schools. This money was divided as follows: $52,000 for agricultural education, $50,000 for industrial education, $18,000 for household arts, and $15,000 for the part payment of the tuition of pupils in vocational schools maintained by districts other than their own.

The State board of education is charged with administering this act, and the State superintendent of public instruction is made the executive official of the State board.

Bulletins.—Bulletins have been prepared by the vocational division of the department of public instruction covering "Vocational education in Pennsylvania," "Agricultural schools and departments," "Evening industrial classes," and "Household arts schools and departments." These bulletins are issued with the purpose of setting forth the plan of organization and conditions which must be met by the various schools in order to receive State aid.

Evening industrial schools for machinists, carpenters, bricklayers, plumbers, mine workers, electricians, tinsmiths, and printers are maintained in Philadelphia, Pittsburgh, Williamsport, Wilkes-Barre, Nanticoke, Wamanie, Shamokin, Ellsworth, and Cokesburg. The mine industry, although one of the greatest industries in the State of Pennsylvania, has in the past received little or no attention in the way of adapting the schools to its particular needs. Last year schools for mine workers were very successfully maintained in Nanticoke, Wamanie, Glenlyon, and Shamokin. The success attending these schools is shown by the fact that from the Nanticoke and Glenlyon schools 28 men took the State examination for assistant mine foreman's certificate, 24 of whom passed; 6 took the examination for mine foreman's certificate, 4 of whom passed. From the Mount Carmel and Shamokin schools, 2 men passed the examination for mine foreman's certificate, and 6 men received the assistant mine foreman's certificate. At Ellsworth 3 men took the examination and passed for assistant mine foreman's certificate. In the Nanticoke and Glenlyon districts there was a total enrollment of 657 for 1912–13, an increase of 529 over the previous year. The average attendance for the year 1912 was 30 per cent. The Mount Carmel and Shamokin districts had an enrollment of 763, with an average attendance of 34 per cent. Mount Carmel conducted a class for non-English speaking adults, which was a great success.

The above-mentioned cities have opened mining schools for the year 1913–14. Nesquehoning and Shickshinny, Lykens, Wisconisco,

and Williamstown have organized evening industrial schools for miners. Wilkes-Barre has organized an evening school for machinists. Williamsport, Philadelphia, and Pittsburgh are conducting evening industrial classes. The teachers for the evening industrial schools are recruited from the ranks of the men employed in the industries. So far it has been possible to secure men with anywhere from 6 to 21 years' experience. It is true they lack the teaching experience, yet with organized lessons in their hands they are doing remarkably well at the present time.

Rural schools.—Several experiments have been conducted in connection with rural schools, and an attempt has been made to make the work more practical, so as to meet the needs of the community. While this work is not vocational when interpreted in terms of the law, yet it approximates that type of work as closely as any that can be given in such schools. The work consists mainly in construction of potato crates, repairing harness, and various other activities connected with rural life.

WISCONSIN.

In June, 1911, Wisconsin passed the law providing for industrial and continuation schools. During the year 1911–12 two schools were established and maintained, one at Racine and one at Manitowoc. The law provides for a State board of industrial education composed of nine members, and for each city of 5,000 inhabitants an industrial board of five members appointed by the regular board of education. The State reimburses each city one-half of its expenditures in maintaining these schools.

Schools.—There are four classes of schools: (1) For apprentices; (2) for persons over 14 and under 16 employed for wages; (3) all-day industrial or commercial school for persons under 16 temporarily unemployed and for exceptional pupils transferred from established schools; (4) evening classes for persons over 16 years of age.

During the year 1912–13 local industrial boards were appointed in 35 of the 39 cities having 5,000 or more inhabitants. Schools were maintained in the following cities during that year: Beaver Dam, Beloit, Chippewa Falls, Eau Claire, Fond du Lac, Green Bay, Janesville, Kenosha, La Crosse, Milwaukee, Marinette, Madison, Manitowoc, Oshkosh, Racine, Superior, Sheboygan, South Milwaukee, Two Rivers, Wausau, and West Allis.

The number of persons served in the day classes during that year is approximately 6,000, and about the same number in the evening classes.

The legislature of 1913 amended the law of 1911 by increasing the State aid from $35,000 annually to $150,000 annually, and it increased

the number of schools to be established from 30 to 45. By November 1, 1913, the 45 schools had been located. The maximum amount of State aid to be paid any one city is $10,000. Milwaukee will spend $150,000 in these schools the coming year, and the rest of the State will spend approximately $300,000. This makes a total of $450,000 available for these part-time schools during the year 1913–14.

Contracts with apprentices have been executed at Beloit, West Allis, Kenosha, South Milwaukee, Fond du Lac, Madison, Superior, Milwaukee, Two Rivers, La Crosse, and Eau Claire. The number of pupils over 14 and under 16 who are working on labor permits has not materially decreased since the organization of these schools.

Buildings are being equipped for all-day industrial schools at Eau Claire, La Crosse, Janesville, Milwaukee, Superior, Wausau, Sheboygan, Oshkosh, Fond du Lac, Green Bay, Racine, Kenosha, West Allis, and Beloit.

Subjects taught.—The law specifies what instruction shall be given in these schools in the following language:

> For apprentices, two hours a week, instruction in English, citizenship, business practice, physiology, hygiene, and the use of safety devices. Three hours, such other branches as may be approved by the State board of industrial education.

The State board has approved shop mathematics and drawing.

> For permit pupils the instruction shall include English citizenship, sanitation and hygiene, and the use of safety devices, and such other branches as the State authorities shall approve.

The authorities have approved applied mathematics, drawing, homemaking, sewing, cooking, and applied art.

> For all-day industrial or commercial school, six hours per day, five days per week; three hours of the six are devoted to shop and home activities and three hours to related academic instruction. The evening continuation classes study machine drawing, gasoline engine practice, architectural drawing, applied design, pattern-making, plumbing, free-hand drawing, shop mathematics, cabinetwork, forging, millinery, dressmaking, sewing, household arts, retail selling, telegraphy, shorthand, typewriting, bookkeeping, electricity, citizenship, English, English for foreigners, hygiene, and interior decorating.

INDIANA.

Legislation.—Vocational education in Indiana has been put upon a firm and comprehensive basis by the new Indiana vocational education law, passed February 22, 1913. This law provides:

1. That school cities, towns, and townships are authorized to maintain and carry on instruction in elementary domestic science, elementary industrial work, elementary agriculture, as a part of their regular course of instruction, and that regular courses in agriculture, domestic science, and in industrial subjects must be offered in all commissioned and certified high schools of the State. This work has been designated by the State board as *prevocational* work,

to distinguish it from the *vocational* work, to be done in the special vocational departments and schools. No State aid is provided for prevocational work.

2. The law also provides that vocational departments and schools—*all day, part-time* and *evening* vocational schools for domestic science, agriculture, and the industrial arts—may be established as a regular part of the public-school system of the State. The controlling purpose of these vocational departments and schools must be "to fit for profitable employment," and if organized and conducted according to the definitions contained in the law and the rules and regulations adopted by the State board of education for the organization and conduct of the vocational departments and schools the State will pay two-thirds the cost of instruction.

3. The law further provides that a county agricultural agent may be appointed for each county in the State who shall, under the supervision of Purdue University—

> cooperate with farmers' institutes, farmers' clubs, and other organizations, conduct practical farm demonstrations, boys' and girls' clubs, contest work, and other movements for the advancement of agriculture and country life, and to give advice to farmers on practical farm problems, and aid the county superintendents of schools and teachers in giving practical education in agriculture and domestic science.

One-half the salary of these agents is paid by the State.

4. The law further provides for the enlargement and reorganization of the State board of education, which is authorized and directed to investigate and aid in the introduction of vocational education in the State; for the appointment of a local advisory committee representing local trades, industries, and occupations, "to counsel and advise with the local school boards having charge of the management and supervision of the vocational departments and schools;" for the appointment of a deputy State superintendent of public instruction in charge of vocational education, and an "agent for supervising agricultural education," etc.

Appointments.—On June 1, 1913, Dr. William Frederick Book, of Indiana State University, was appointed State director of vocational education, and Z. M. Smith, of Purdue University, was appointed supervisor of agriculture.

Bulletins.—Three bulletins have thus far been issued by the department: (1) *A letter of information regarding the vocational law and work*, directed to superintendents and teachers, July, 1913. (2) *A tentative course of study in industrial subjects for the public schools of Indiana*, August, 1913. This bulletin gives detailed courses of study in agriculture, manual training, and domestic science for the seventh and eighth grades, and a two years' course in these subjects in the high school. It sets forth the aim and purpose of the prevocational work in the regular schools, its relation to the vocational work to be

done in the special vocational departments and schools that are to be added, and gives general suggestions and helps to teachers for the prevocational work. (3) *Present status of industrial and vocational work in Indiana,* containing information for superintendents and school boards, presented at the State superintendents' meeting, November 7, 1913.

Problems considered.—The following problems are at present under consideration by special committees and the department: (1) More specific and concrete helps for the teachers engaged in teaching the prevocational work in the regular schools. (2) The final scope or limits of this prevocational work. (3) An effective plan for training teachers to do this compulsory prevocational work. (4) Listing and arranging projects in domestic science, manual training, and agriculture that can be taken up to advantage in a county, city, or town school. (5) The preparation of a bulletin describing the most successful ways that have been used to correlate the instruction in industrial subjects in the regular schools with the teaching of English, mathematics, geography, and history.

Investigations.—The following investigations are being made: (1) A vocational survey of the State to ascertain the vocations and professions that are open to the young people of Indiana. (*a*) The opportunities presented by each as to wages, hours of labor, chances for promotion, etc. (*b*) The nature and character of the work. Its effect on health of worker, dangers, moral condition of occupation, degree of transiency or permanency of work, etc. (*c*) Kind and amount of preparation needed, and cost of same in time and money. (*d*) Opportunities for receiving the necessary training for these several vocations and professions, etc. (*e*) The facilities for vocational education and guidance in the State.

(2) A standard card is in preparation upon which may be kept a record of a pupil's special interests, his success with different types of school work, and such other facts about his home conditions, mental and emotional characteristics or traits, special talents and interests, as would enable teachers and parents to give valuable help in advising a boy or girl, in his later school career, in the choice of an occupation or life career.

(3) Arrangements are also making for an expert to devise, verify, and standardize tests that might be used by superintendents and principals to detect marked ability in the brighter pupils, in the field of art, music, mechanical manipulation, constructive work, science, business, invention, etc., so that these gifted pupils might early be given the opportunity of conserving and developing their special talents and capacities.

As the provisions of the law pertaining to State-aided vocational schools do not take effect until September, 1914, the department of

public instruction and State board are devoting the present year to a study of the problems involved in the organization and administration of vocational work and to the introduction of the prevocational work in the regular schools, and the work in vocational guidance indicated above. Regular vocational work has been begun in a number of cities, but the rules and regulations which are to govern the organization and conduct of State-aided vocational departments and schools in Indiana will not be published before February, 1914.

INDUSTRIAL EDUCATION UNDER STATE SUPERVISION IN PENNSYLVANIA.

The foregoing summary of recent activities in those States which have established State systems of industrial education may be supplemented by the following more extended statement, prepared by Roy Mason, of conditions in Pennsylvania. It is interesting to note some of the typical local problems that present themselves, and the ways and means that have been devised thus far to solve them.

It has not been possible to tabulate results in the comparatively short time that the State department of public instruction has had charge of vocational education, but detached instances of excellent work accomplished are numerous. In addition to the statements made on another page concerning the practical results achieved in preparing men to pass the State examinations for positions as mine foremen, assistant foremen, inspectors, etc., it is to be noted that over 70 men were promoted to more lucrative positions in the collieries of the Lehigh Valley Coal Co. as the result of their studies during the past year in the Lehigh Valley mine schools at Centralia and Lost Creek.

Dr. Nathan C. Schaeffer, State superintendent of public instruction, gets at the question of results in a different but equally convincing way.

You will find the value of a boy's time at school by subtracting the earnings of a life of uneducated labor from those of a life of educated labor.

If an uneducated man earns $1.50 a day for 300 days a year, he does very well. If he keeps it up for 40 years, he will earn $18,000. An educated man is not usually paid by the day, but by the month or year; you will admit that $1,000 a year is a low average for the earnings of educated labor.

For 40 years you have $40,000 as the earnings of the educated man. Subtract $18,000 from $40,000 and the difference of $22,000 must represent the value of a boy's time spent at school getting an education.

The same method of calculation can be applied to the workman who has acquired enough knowledge to master the details of the job ahead, and the resulting increase in wages multiplied into years amounts to a goodly figure.

The Pennsylvania law designates the State superintendent of public instruction as the executive officer of the State board of education and confers on him authority to employ expert assistants; and it provides that any school district may, through its board of school directors, establish and maintain schools or departments of industrial, agricultural, and household arts education.

SCHOOLS FOR MINE WORKERS.

The most important of the several movements which led up to this legislation was the establishment of schools for the anthracite mine workers of Pennsylvania. Five years ago mine schools were established by the Young Men's Christian Association in Wilkes-Barre and Scranton. They held evening courses for the mine workers, to

the support of which the coal operators contributed, one of them (the Pennsylvania Coal Co.) contributing as much as $10,000 in 1910. Realizing the value of these sporadic efforts, certain operators decided three years ago to contribute to the Mining Institute and to improve, if possible, and broaden the courses. Joseph J. Walsh, a State mine inspector, planned the courses free of charge. The schools thus established were helped out by the Mining Institutes, Lehigh & Wilkes-Barre Coal Co., Delaware, Lackawanna & Western Railroad Co., Susquehanna Coal Co., and Mineral Railroad & Mining Co. Big meetings of mine workers were held at which ideas were exchanged and papers read on many aspects of anthracite mining. These meetings have been described as partaking of the nature of a lecture course and an old-time debating society, with all of the merits and none of the defects of each.

In 1911 the school laws of Pennsylvania were codified and provision was made for vocational education, both agricultural and industrial. In the spring of that year the institutes passed resolutions commending the action of the legislature. The element which was then lacking in the success of the growing schools was the supervising and guiding hand of the public-school authorities. In the spring of 1912 the institutes petitioned the public school boards to take over the schools and administer them, which they did.

In addition to the schools mentioned, for which the instructors were employed and the rooms furnished by the public-school authorities, and which were open to workmen employed by any and all of the coal operators, some of the operators were maintaining private schools of a similar nature, open to all mine workers, but not under public-school supervision. The Lehigh Valley Coal Co. has had schools at Lost Creek and Centralia since 1910; and their apprentice school at Drifton, where attendance is compulsory, but the apprentices are paid at their regular rate for the time, has completed its sixth successful year. The Philadelphia & Reading Coal & Iron Co. maintains schools for its miners at Mahanoy City, Shenandoah, Minersville, and Pottsville. So enthusiastic are the miners over the possibilities for advancement which these schools open to them that the foreman of one of the mines of the Scranton Coal Co. had the unselfish devotion to teach, single handed, 40 men all last winter in addition to his regular work. But the State department of public instruction is directly interested only in those schools which are conducted under the ægis of the public-school authorities.

The subjects taught in the mine schools are mine gases, mine ventilation, mine law, mine surveying, electricity and magnetism, mechanics, air compression, the correlated arithmetic, and general instruction in such subjects as timbering, trackwork, hoisting, hauling, pumping, drainage, steam and steam boilers, and the preparation of anthracite. There are classes for non-English-speaking adults and elementary classes for boys. It is not generally understood that there are nearly a hundred different positions in and about the mines for which special training is not only advisable, but often indispensable.

The classes are held in the public-school buildings, as centrally located as possible for the accommodation of the largest possible number. It has been found the best practice to conduct these classes only three nights a week, but in some places the miners have insisted upon having the classes five nights a week. Under the provisions of the vocational-education laws by which they are to benefit, no session must be less than two hours, and there must be a total of 80 sessions, or 160 hours. The present plan is to have the schools continue 27 weeks, three sessions each week, beginning in October each year. Former experience has shown that grown men should not enter elementary classes along with children, and so the present method is to have the classes at night for men only.

A large part of the instruction has been given hitherto by public-school teachers who were not thoroughly equipped for the particular subjects and work. The institutes employed a director to look after the men at Nanticoke and Shamokin, who

spent one week a month visiting the men. He was employed by the coal companies. After the public-school authorities saw the value of the movement and that the schools were in their control, they gave their hearty and enthusiastic support. More and better work is prognosticated for the season of 1913–14.

The tendency has been to limit the instruction to the men workers underground, but the curriculum is to be broadened to include the foreman and the engineer. Some work is even contemplated for driver boys and some to educate door boys to become driver boys. A practical school organizer will be in charge, and the mine foremen, assistant mine foremen, and the younger engineers will be asked to officiate as teachers and pass along their knowledge. This means a great sacrifice of time and effort, but no more than that of the men who are making the effort to profit by their sacrifice.

ASSISTANCE OF ADVISORY BOARDS.

One point upon which the State department of public instruction lays great stress in the development of plans is that there shall be advisory committees representing both the employers and the employed to cooperate with the public-school authorities in the proper conduct of the schools. This will unite the three necessary elements, the knowledge of the needs of the employer and of the employee and the knowledge and experience of the public-school authorities—which is the strongest combination possible.

In the bituminous mining region of Pennsylvania less work has been done. There are mine schools at Ellsworth and Cokesburg, 95 per cent of whose aggregate population of 3,000 persons consists of foreigners or the children of foreign-born parents. At these schools the courses vary to some extent from those of the anthracite mine schools on account of the different requirements of the bituminous mines, but they are essentially the same. All of the men from these schools who took the State examination this year for mine foremen's certificates passed and secured their certificates. They were six in number. There were also cooking classes for foreign women at Ellsworth last year.

SCHOOLS FOR MECHANICAL TRADES.

At Williamsport there has been an industrial night school conducted by the public-school authorities for about three years. It was established to give courses in connection with the Pennsylvania State College engineering department, and gives instruction in electricity, mechanical drawing, materials of construction, mathematics adapted to the various local trades, arithmetic, geometry, and algebra—all as applied to the problems confronting the students in their daily work. There are lumber mills, rubber works, silk mills, furniture factories, tanneries, many machine shops, and other manufacturing plants in this town.

The city of Scranton conducts two night classes in cooking and sewing and millinery for both men and women. The classes are held in the public-school buildings and supported by the public-school district. These are two of the few graded night schools in the country. Drawing, both architectural and commercial, is also taught. The curriculum of such a night school depends upon the dominant industry of the community.

In Philadelphia is one of the oldest trade schools in the East, founded in 1906 in one of the elementary public schools, which conducts both day and night classes. Last year over 1,000 apprentices attended the night classes, where instruction is given in electricity, the sheet-metal trades, carpentry, patternmaking, plumbing, and other subjects with a definite application to the industries of that city. In the day classes instruction is given in patternmaking, electrical instruction, carpentry, printing, sheet-metal work, mechanical and architectural drawing, and sign painting. It is a significant fact that several of the trade-unions require their apprentices to attend the night schools.

In the Altoona high school there is a day course in which machine-shop practice and patternmaking are taught. The aim of this school is primarily to prepare boys for employment in the local mechanical industries, particularly the shops of the Pennsylvania Railroad, which contributed $25,000 for the equipment for trade instruction.

In York an interesting cooperative plan of teaching was instituted in 1911. Forty boys from the local machinery manufacturing industries were paired off so that one of each couple could attend the courses every alternate week. They were taught the mechanics of machinery, physics, and geometry. After the courses were started the rate of pay of apprentices was increased and at graduation they are classed practically as journeymen.

Pittsburgh boasts two elementary industrial schools which are prevocational—that is, they give each student a variety of experience in order to enable him to make a selection of a trade for his life work. The courses include the metal trades, carpentry, patternmaking, the machine trades, and electrical construction.

CONCLUSION.

The foregoing is a brief summary of what is done in Pennsylvania in industrial education with the cooperation and assistance of the public schools. It refers only incidentally to the private or philanthropic industrial schools in which the tuition is also free. Under an act passed May 1, 1913, the appropriation of $140,000 can be used to reimburse these schools to the extent of two-thirds of the cost of teaching the practical and related technical and academic subjects of the previous year, up to a maximum of $5,000, provided that the State board of education through the superintendent of public instruction has approved their organization, control, location, equipment, courses of study, qualifications of teachers, methods of instruction, conditions of admission, employment of pupils, and expenditures of money.

CHAPTER XII.

POPULAR EDUCATION IN FINE ART IN THE UNITED STATES.

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SYLLABUS.

I. EDUCATION.

Three senses of the word "education." The loose sense; the broad sense; the narrow sense.
Double meaning of process and product in each sense.
Confusion between loose and broad senses; between broad and narrow senses; between senses of process and product.
The word "education" to be here used in the narrow, but not narrowest sense of a process.

II. FINE ART.

Fine art the embodiment of fancy for its own sake.
Corroboration by artists and critics.
Two implications: (1) A public; (2) completing the artist.
The effort of appreciation.
Corroboration by artists and critics.
Corollaries: (1) Kinship of public with artist; (2) dependence of artist on public.

III. EDUCATION IN FINE ART.

Education in fine art may aim to form either artists or publics.

IV. POPULAR EDUCATION IN FINE ART.

Popular education in fine art the formation of publics.
Fine art surrounds real life with an endless galaxy of ideal worlds, citizenship in some of which is the birthright of everyone.
Popular education in fine art should not be mainly technical, nor historical, but critical.
A scheme of popular education in fine art through criticism.

V. CULTURE.

The appreciation of fine art is what is called "culture."
Lack and need of culture in the United States. Responses to this need.
Final ambiguity in the word education. Instruction in culture does not insure education in it. Let patience have her perfect work.

I. EDUCATION.

The word "education" is a very ambiguous one, and the parent of much misunderstanding. It conveys the general idea of a modification of personality in three senses, which may be called respectively a loose, a broad, and a narrow sense. In the loose sense education is synonymous with influence, in the broad sense with improvement, and in the narrow sense with teaching.

The loose sense was thus defined by John Stuart Mill in his rectorial address at the University of St. Andrews in 1867: "Whatever helps to shape the human being—to make the individual what he is, or hinder him from being what he is not—is part of his education." Now every one of our experiences in life helps to shape us. Some trace is left upon us by each. We are somewhat different afterward from what we should have been had this particular event not happened. Hence, using the word in the loose sense, nothing short of the whole life history of any one constitutes his education. "Education is life." [1] The alcohol that contributes to make the European what he is, and the opium that contributes to prevent the Asiatic from being what he might be, are educational forces. Most readers will meet this claim with a mental revolt which is proof that the loose sense of the word "education" is not the customary one, but an extravagance of speech. Those who, like most of us, believe in and wish to forward education, will refuse to admit that it includes all influences, the bad as well as the good, the demoralizing as well as the elevating. We shall demand that when people talk about education in our hearing they shall mean something good by the word. They shall not mean such influences as a fascinating scoundrel may exert upon a weak-willed companion, or such as a mental shock exerts over the reason it dethrones. Nothing shall be education for us which is not an improving influence.

This second, or broad sense of the word "education" has been analyzed with admirable clarity by President Hadley. "In the broad sense it [education] includes every exercise of activity which is valued, not for its direct results, but for its indirect effects upon the capacity of the man who is engaged therein." [1] Every experience in whose result upon the personality we can see the promise of future good; every event whose ineluctable trace upon us is formative, and neither indifferent nor deformative, is part of our education; and only such events are. Using the word in this broad sense, Richard Steele said of Lady Hastings that to know her was a liberal education. Here was a vivid and gallant recognition of a perpetual outflow of humanizing influences from a lovely woman. The remark is quoted also as a tribute of Chateaubriand to Madame Récamier.

Yet we should not speak of Lady Hastings as an educator, nor treat of Madame Récamier in a history of education in France. There is a narrow sense in which the word is most commonly used. Although North American vim has been traced to the dry air of our continent, the latest achievements of the United States to the impulse given by the freeing of Cuba, and no greater formative influences have ever existed in this country than the examples of Washington and Lincoln, the United States Bureau of Education does not observe and record

[1] Symposium on Education. The Brooklyn Eagle, 1903.

such factors of national progress as climate, crises of history, or commanding personalities. Education as most commonly understood means more than influence, more even than formative influence. It means intentional formative influence—the purposed molding of one personality by another. This is the common, everyday root meaning that runs through the words education, educator, educational effort, educational appliances and the like; and this root meaning Mill expressly recognizes in the address at St. Andrews. After defining education in the loose sense in his opening paragraph he devotes the rest of his discussion to that "which each generation purposely gives to those who are to be its successors, in order to qualify them for at least keeping up, and if possible for raising, the level of improvement which has been attained." Emerson uses the term in this customary sense, alluding also to a possible broader meaning when he writes: "What we do not call education is more precious than that which we call so." [1] The most elevating influences of all, he thinks, are those which are not intentionally applied and so not customarily spoken of as a part of education. People are molded to better effect without formal means than by any of the apparatus we call didactic.

These three senses—the loose, the broad, and the narrow—do not exhaust the ambiguities of the word education. Each of the three has a primary and secondary meaning duly set forth in the dictionary. The primary meaning is that of a process; the secondary that of its product. Education means at once the imparting of capacity and the capacity imparted; the communication of knowledge or skill and the knowledge or skill communicated. In one sense it means an operation of which the mind or body is the subject; in the other a mental or bodily condition at which the operation aims. When we say "The control of education should be entrusted to the State," we are using the word in its primary sense of a process which the State should apply to its citizens. When we say "Popular education is vital to a democracy," we are using the word in its secondary sense of a product which a democracy needs to develop within itself.

This manifold ambiguity affords ample room for misconception. A confusion between the loose sense, in which education means influence of any kind exerted upon the individual, and the broad sense, in which it means formative influence only, lends itself to a fatalistic optimism. If every experience is part of our education, then whatever is, is in the right direction. If the world is all a school, then all's well with it literally. A resolute faith that the world may be made better gives place to the enervating persuasion that its every detail is for the best. We dare not prevent anything lest we lose its lesson; nor dare we bring about anything, ignorant as we

[1] Spiritual Laws.

are whether we can better what is already for our good. So old-time doctors forbade ether in childbirth lest the lesson of its pains be lost. Through the use of one word for both improvement and influence, the glamour of the one envelops the other also. We take up our abode on the borderland of a fool's paradise.

A confusion between education in the broad sense of formative influence and education in the narrow sense of intentional formative influence tends to an opposite error. We are misled into thinking educational effort the panacea for all the ills of society. In particular, we exalt educational effort in its narrowest sense—that of the influences directed exclusively upon the young *en masse*. If education—meaning formative influence—includes, as in this sense it does, every agency of personal advance, then all that need be done to insure the indefinite improvement of the individual is to look to our system of education—meaning the formal training given by each generation to the next. The glamour of the idea of the betterment of character concentrates itself upon one of the means to this end—and, as Emerson notes, one of the less precious means. Our faith in the machinery of instruction becomes unconsciously inflated beyond all reason. The school becomes a fetich. We overlook chronic failings of schooling at its best; its development of the memory at the expense of the intelligence, its comparative impotence to perfect the will. "Sir," said Wellington to his highly instructed aide, "you have too much knowledge for your comprehension." Of some royal children Henry Crabb Robinson writes: "These children are overcrammed; they know all the sciences and languages, and are in danger of losing all personal character and power of thought in the profusion of knowledge they possess." [1] Again, furnishing the mind does not in itself direct the will. In technical language, judgments of fact and judgments of worth are mutually irreducible. There is no mental chemistry by which *I see* can be transmuted into *I choose*. However we train the mind, unless the heart be independently disposed, we are but fashioning an instrument of futility or a weapon of evil. But these criticisms of education in the narrow and narrowest senses have the ring of *lèse-majesté* to those whose enthusiasm is fed by the broad meaning of the term.

Finally, a confusion between education in the sense of process and education in the sense of product helps toward a fictitious valuation of preparatory agencies. We come to cherish training mistakenly for its own sake. It is a common human failing to forget the end for the means. Mr. Chesterton has said that practical men generally know everything about the matter they have to deal with except what it is for; inclined, as Terence wrote, *propter vitam, vivendi perdere causas*. The use of one vocable for both means and end favors this shortsight-

[1] Diary II, p. 104.

edness. If education—in the sense of developed capacity—is the ideal for humanity, then education—in the sense of the development of capacity—is the greatest thing in the world. Yet this is a conclusion impossible to thinking beings. If the development of capacity is the greatest thing in the world, then developed capacity is secondary, and since an end takes precedence over its means, the development of capacity is tertiary. Nevertheless we have just asserted it primary. The way out of this self-stultifying tangle is resolutely to hold the two ideas of process and product apart, in spite of their common name, and clearly to acknowledge that it is the exercise of capacity that gives its development worth. Schooling was made for man and not man for schooling. As President Hadley has said, an educational process is one which is valued for the capacity it engenders. Only in so far as the built character emerges, as its capacities show their development in action, do our efforts in character building prove their merit. The good life, and not the business of preparing for it, is the greatest thing in the world.

For the purposes of the present discussion of popular education in fine art, it will be convenient to use education in the sense of process, not of product, and in its narrow but not its narrowest sense. So choosing among the ambiguities of the term, it will signify intentional formative influence, whatever its appliances and whoever its subjects. Artistic education will denote all training in fine art, whether given in school or out, to adolescents or adults.

II. FINE ART.

Works of fine art are commonly called creations of the imagination. The definition is simple, clear, and unequivocal, but not satisfying. Is not a steam engine also a creation of the imagination, or a coal mine, or an intrigue, since all exist in the fancy of their projectors before existing in fact? Wherein does a work of fine art differ from any other plan brought to pass?

In that it is finished when it is imagined, and is put into external form only to preserve it. Dante writes: "*Who paints a figure, if he can not be it, can not draw it;* that is to say, no painter could draw a figure unless he previously made it in his mind as it ought to be."[1] But a steam engine, a coal mine, an intrigue, are intended to be more than they are in advance in the mind. They are only begun when they are designed and are not done until the design is executed. They who execute them, not being "of imagination all compact" aim beyond giving "to airy nothing a local habitation and a name." An artificer in embodying his fancy may be inspired by either of two purposes—that it should exist permanently or that it should bring about something else. In the first case, the work of his hand is a work of

[1] Canzone XVI: as interpreted by himself in the Convito: IV. Cap. 10.

fine art; in the second, a work of useful art. The aim of a work of useful art—a steam engine, a coal mine, an intrigue—lies beyond itself, in the flight of trains, the payment of dividends, personal fates. The aim of a work of fine art lies within itself—that it should be perceived as it has been imagined. However an artist may be governed in embodying his visions by what he aims to have them accomplish—whether to reconcile himself with Heaven, to turn his fellows to good courses, to impart to them information outside the work itself, to win himself fame, or buy himself bread—it is that in them which he puts there solely not to let it die that constitutes its substance as a work of fine art. Its artistic content is comprised within what it is and does not extend to what it does.

The avowal is met everywhere among artists and their critics. Goethe wrote: "I sing as the bird sings that lives in the branches. The song that must from the throat is a reward that richly pays."[1] Again, "The wish for applause which the writer feels is an impulse that nature has implanted in him to entice him on to something higher,"[2] that something higher being the sharing of his happiest thought. To a strongly religious nature like Cowper poetic genius was—

> The gift
> To trace Him in His words, His works, His ways,
> Then spread the rich discovery, and invite
> Mankind to share in the divine delight.[3]

The motive of expression, essential to fine art, has been stated in sober and modest prose by our own William M. Hunt: Artists "expose their work to the public, not for the sake of praise, but with a feeling and hope that some human being may see in it the feeling that has passed through their own mind, in their poor and necessarily crippled statement." [4] Of Shakespeare, Lowell writes: "I have said it was doubtful if Shakespeare had any conscious moral intention in his writings. I meant only that he was purely and primarily poet." [5] Again, "The question of common sense is always, What is it good for?—a question which would abolish the rose and be answered triumphantly by the cabbage" [6]—the cabbage being good to destroy for bodily support, the rose only to enjoy while it lasts.

A work of fine art, according to these avowals, is something of which the simple contemplation is worth while; and the artist creates it that this contemplation may take place. His purpose—that the work shall be perceived as it has been imagined—conveys two implications.

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[1] "Der Haerfner."
[2] Einleitung in die Propylaen, p. 209.
[3] Table Talk.
[4] Talks about art. 1st series, p. 123.
[5] Shakespeare once more.
[6] Chaucer.

First, there is involved in the conception artist—or poet in the wide meaning of *ποιητής*, or maker—the idea of a public. Creation, in the artistic sense, implies contemplation. The maker can not be thought without the beholder. Goethe wrote: "The artist is not conceivable alone, moreover does not want to be alone. The work of art challenges men to delight in it, and to share their delight in it." [1] Alphonse Daudet has written: "The artist is not a hermit. However one may seek to retire from or lift oneself above the public, it is always in the last analysis for the public that one writes." [2]

Second, a work of fine art is an open letter, addressed not to particular individuals, but to any who can read it. With an outlook as wide as humanity, its aim is reached, not by every inspection of it, but only when it is perceived as it has been imagined. The artist is a half-being whose complement is the beholder who so perceives his work. This perception by the one which duplicates the imagination of the other is what is called the appreciation of fine art. In printing, when the outlines of one impression are exactly superposed upon those of another, the two are said to "register." In like manner, in order that a work of fine art should exist, the mind of the beholder must "register" with that of the artist. It is the scientific fashion nowadays to think of every activity of mind as having its counterpart in some special activity of brain—a current, or explosion, or however else we may conceive it, of a particular kind. Using this convenient theory, appreciation may be said to consist in the exact reproduction in another brain of certain currents or explosions that once took place in one perhaps long since moldered into dust. It is in this perpetual reperformance of a strain that once beguiled a single fancy that fine art has its being.

The appreciation of fine art is therefore at once an integral part of it and a definite form of response to its creations, namely, the precise echo of the voice that bade them live. A work of art does not exist for a beholder who simply enjoys himself over it; he must enjoy it. He must make himself over in the image of the artist, penetrate his intention, think with his thoughts, feel with his feelings. Okakura-Kakuzo writes: "An eminent Sung critic once made a charming confession. Said he, 'In my young days I praised the master whose pictures I liked, but as my judgment matured I praised myself for liking what the masters had chosen to have me like.'" Again, "The tea master, Kobori-Enshiu, himself a daimyo, has left to us these memorable words: 'Approach a great painting as thou wouldst approach a great prince.'" [3] The same comparison has been used by Schopenhauer: "One should look at a picture as one meets a monarch, waiting for the moment when it will please him to speak

[1] Ueber den sogenannten Dilettantismus.
[2] Souvenirs d'un homme de lettres, p. 151.
[3] The Book of Tea, pp. 107 and 108.

and for the subject of conversation which it will suit him to choose. One should not be the first to address either the one or the other, for thereby one runs the risk of hearing only one's own voice." [1] This attitude is that of the understanding of fine art in the capital acceptation of that word. The picture, the statue, the building, is a sign that something once existed in the fancy of another which he was unwilling to let die. What was that something? When we have answered this question aright—always a searching question, often difficult, sometimes insoluble—we comprehend the work, and not until then. Then, and not until then, do we perceive it as it was imagined.

The testimony of those who know is unequivocal on this point also. Luther's estimate of the extent to which a reader who would understand literature needs to duplicate his author appears in the last writing from his hand. "Virgil, in his Bucolics, can be understood by no one who has not been five years a shepherd. Virgil, in his Georgics, can be understood by no one who has not been five years a farmer. Cicero, in his Letters, can be understood by no one who has not shared in a large public life for five and twenty years. The Holy Scriptures let no one think he has thoroughly digested unless with prophets like Elijah and Elisha, with John the Baptist, with Christ and the Apostles, he has ruled religious communities for a hundred years together." [2] The genuine lover of art, Goethe tells us, "feels that he must lift himself up to the artist in order to enjoy his work.[3] In a comment on another remark of Goethe's, M. Paul Bourget thus describes the temper of appreciation: "Goethe expressed the principle with his accustomed depth in saying, 'If one have not studied things with a partiality full of love, what one thinks about them is not worth saying.' * * * To be partial in the sense in which the Altmeister of Weimar used the expression means to have given the artist due credit, to have placed oneself at his standpoint, to have associated oneself with his purpose, to have demanded from him nothing that he did not intend. * * * This power of sympathy marks the true lovers of literature, those to whom it is really a living thing." [4] Saint-Saens notes that the present generation can neither comprehend nor love the music of Gounod, "regarding it in a false light and giving it a significance altogether different from what the composer intended.[5] The appreciation of poetry seemed almost an impossible task to Oliver Wendell Holmes. "Hardly anyone ever understands a poem but the poet. * * *

[1] The World as Will and Representation, Vol. II. Cap. 34.

[2] Quoted in Gedanken ueber Wissenschaft und Leben. Prof. Adolf Harnack. Int. Wochenschrift fuer Wissenschaft, Kunst, und Technik, No. 1, April 6, 1907.

[3] Ueber Wahrheit und Wahrscheinlichkeit der Kunstwerke, p. 294.

[4] From the preface to France et Belgique, by Eugène Gilbert.

[5] Annales Politiques et Littéraires, No. 1576, 7th Sept., 1913.

It fits the mental mold in which it was cast, and it will hardly fit any other."[1] How fleeting and uncontrollable our sympathy with plastic and pictorial art may be is vividly revealed in Hawthorne's Notebooks. Of the Vatican sculptures he writes: "It is as if the statues kept, for the most part, a veil about them, which they sometimes withdraw, and let their beauty gleam upon my sight; only a glimpse, or two or three glimpses, or a little space of calm enjoyment, and then I see nothing but a discolored marble again. The Minerva Medica revealed herself to-day." Again, of Guido's Hope, "If you try to analyze it, or even look too intently at it, it vanishes, until you look at it with more trusting simplicity."[2] Of the Preludes and Fugues of Bach's Well-Tempered Clavichord, Moritz Hauptmann wrote: "They are as difficult to hear as to play; and even hearing is not all of it. One must know them so perfectly that one can, as it were, create them oneself."[3] Writing of pictures, John La Farge notes that "they are excusable who feel as if they had made the work which they admire. They become, for an instant, the man who made it."[4]

Two corollaries of interest result. The power of appreciation in everyone is limited to those artists of whose natures he partakes. Those artists alone rise into prominence who reflect the spirit of a time. Of the limits of appreciation Sainte-Beuve writes: "According to a very acute and just remark of Père Tournemine, one admires only those qualities in an author of which one has the germ and root in oneself."[5] Okakura-Kakuzo makes the same observation. "We must remember that art is of value only to the extent that it speaks to us. It might be a universal language if we ourselves were universal in our sympathies. Our finite nature, the power of tradition and conventionality, as well as our hereditary instincts, restrict the scope of our capacity for artistic enjoyment. Our very individuality establishes in one sense a limit to our understanding; and our esthetic personality seeks its own affinities in the creations of the past."[6] Of the artist as the interpreter of his age, Joubert writes: "The writers who possess influence are those who express perfectly what others think and who awaken in others ideas or sentiments on the point of being born. It is at the bottom of the heart of peoples that literatures exist."[7] Renan concludes negatively: "Wherever there is no public to nourish and inspire genius, it comes to nothing."[8]

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[1] A Hundred Days in Europe.
[2] French and Italian Notebooks, pp. 166 and 173.
[3] Briefe an Hauser, I, p. 2.
[4] Considerations on Painting, p. 42.
[5] Sainte-Beuve. Portraits Littéraires, I, p. 71.
[6] Okakura-Kakuzo. The Book of Tea, pp. 113–114.
[7] J. Joubert. Pensées, p. 329.
[8] E. Renan. Souvenirs d'enfance et de jeunesse, p. 67.

In the terse saying of the Chinese sage Lao-tse: "If a noble man finds his time, he rises; if he does not find his time, he drifts." [1]

A last question transfers the discussion of fine art to a wholly different order of ideas. Defining it as fancy brought into being for its own sake, is its existence justified independently of other results? We have here left the sphere of what is, and entered that of what should be. The transition is obscured in the familiar contention over "art for art's sake," which like most disputes, owes its difficulty to its complexity. Besides confusing the nature of fine art with its value, the phrase compresses at least four questions regarding its value into one debate. Should men devote time and labor simply to immortalizing happy thoughts? Yes. Are the charming aspects of evil things fit subjects of fine art? Sometimes; tragedy, for example. Should an artist embody his conceptions without regard to their influence? He can not. Are not the most captivating fancies and the most consummate utterances always the indirect result of useful aims? Not always. But however these and other questions of worth may be answered, the truth remains that the sole factors of artistic creation are a moment too good to lose and a hand cunning enough to hold it. Its essence is expressed in the exclamation of Faust: *Verbleibe doch! Du bist so schön!* "Remain! Thou art so beautiful!" [2] The artistic motive, mixed though it always is with others, is in itself the impulse to impart imaginative joy for its own sake.

III. EDUCATION IN FINE ART.

The content of a work of fine art is the imaginative joy to which it owes its being; and in the apprehension of this content by a beholder the work is consummated. Fine art, being in its entirety the union of creating and beholding, offers to education a two-fold opportunity. Formative influence may be applied by intention either to develop creators or to develop beholders. The purpose to develop creators is narrowly special. Poets are born, not made, and their ratio to the total of births is always small. Nor could a large proportion of the community be spared from the realities of life to devote themselves to imaging its ideals. As a matter of actual statistics, those who make fine art in any form their profession, whether as artists or so-called artisans, are but a minute fraction of the whole population. But the purpose to develop beholders is widely general. Everyone can be, and in greater or less measure is, a beholder of works of art.

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[1] Tao-te-King: 600 B. C.

[2] Goethe's Faust. 1st Part. Studierzimmer.

IV. POPULAR EDUCATION IN FINE ART.

Hence, popular education in fine art, meaning by this phrase an artistic education which is owed to every one, consists in forming beholders. The phrases "education in appreciation," "teaching the enjoyment of works of fancy," express its appropriate sphere. The advice of Aristotle regarding training in music was "Let the young pursue their studies until they are able to feel delight in noble melodies and rhythms." [1] They were to be trained not to make but to like; not as poets but as lovers of poetry. The injunction still demands emphasis. Fenollosa writes: " * * * We find prevalent discussions and experiments concerning the teaching of art in schools so permeated with the tacit assumption that its main purpose is to provide an incipient training for possible painters and sculptors, that warning seems necessary. This is to lose sight of the great public value of art. Is it for this that we teach so widely the other fine arts—music and literature? Do we aim, by our musical instruction in schools, in time to train up a nation of eighty million composers? Are our courses in literature devised to transform us into a community of poets? Public education in art does not look so much toward creation as to comprehension." [2] In another sphere Aristotle's counsel has been lately voiced by President Wilson. "A university is a place where the many are trained to a love of science and letters, and a few only to their successful pursuit."

That the many should have their share in the life of the imagination, and hence have the right to receive aid therein, admits of no serious doubt. The real experience of no one is so rich that he can afford to dispense with imaginative experience; nor so poor that he can not take advantage of it. Uhland writes: "Who sees alone what is, has lived his life." [3] Yet what is fine art, it may be asked, but a copy of nature? Were it not better to study the original rather than reproductions that never can equal it? The objection betrays a radical misunderstanding of the relation between art and nature. Fine art is to be compared, not to a mirror, giving back as close a copy as may be of the scenes before it, but to a sky in which new counterparts of earth eternally appear. It is an exhaustless firmament about the real world, incredible as may sometimes seem the endless birth of new luminaries therein. John Stuart Mill relates that at one period of his early life "I was seriously tormented by the thought of the exhaustibility of musical combinations. The octave consists only of five tones and two semitones, which can be put together in only a limited number of ways, of which but a small proportion are beautiful; most of these, it seemed to me, must have

[1] Politics. VIII. 6.
[2] E. F. Fenollosa: Art museums and their relation to the people. The Lotus. May, 1896.
[3] "In ein Stammbuch."

been already discovered, and there could not be room for a long succession of Mozarts and Webers, to strike out, as these had done, entirely new, and surpassingly rich veins of musical beauty. This source of anxiety may perhaps be thought to resemble that of the philosophers of Laputa, who feared lest the sun should be burnt out."[1] It is indeed hard for us now to share in the fear. For we look back upon the immense development of music since Mill wrote, upon Verdi, upon Wagner, upon Debussy; and out upon the musics of other continents, with their unheard-of complexities of rhythm, their differing tones and semitones, their alien keys and modes, their independence of the octave itself. As each true servant of the imagination is born, a new type of ideal existence adds itself to real life for every kindred soul. When we turn from nature to art we take our way into happy worlds which gifted men have formed and are ever forming anew from the materials of this sorrowful earth, as the kaleidoscope forms figures from its bits of glass.

Popular education in fine art, if directed as it should be upon the development of comprehension, will include but a modicum of technical instruction. More would be useless, and even defeat the aim pursued. The problems and methods through which an artist struggles form no part of the imaginative joy he seeks to impart. They are but means to that end. The scaffolding is not a part of the building, nor the stage-machinery of the spectacle. Technical knowledge aids a beholder only if it bring to his attention elements in a work for which his eyes are too dull. It is at the same time a hindrance by diverting his mind from the work itself. Francesco d'Ollanda reports Michel Angelo as saying, "What one has most to work and struggle for in painting is to do the work with a great amount of labor and study in such a way that it may afterward appear, however much it was labored, to have been done almost quickly and almost without any labor, and very easily, although it was not."[2] Unless the Latin maxim *Ars est celare artem* is mistaken in demanding that a beholder should not follow the poet at work, pedagogic theory is mistaken in demanding that he should. Not artists, immersed as they must be in technique, are the best critics, but "those who have failed in literature and art" as Lord Beaconsfield wrote in Lothair; or, as it may be added, those who would have failed had they not known better than to try. The true beholder, in the words of Herr von Seydlitz is he "who can partake in the joy of creation, while sparing himself its travail pains."[3]

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[1] Autobiography, Ch. V.

[2] Third Dialogue on Painting with Michel Angelo. Quoted in "Michel Angelo Buonarroti," by Charles Holroyd, p. 326.

[3] R. von Seydlitz. Monatsberichte ueber Kunst-Wissenschaft u. Kunst-Handel. February, 1901, p. 223.

Neither will education in appreciation assign a large place to the history of art. Its study is a study of the relations between the artistic monuments of different times. The comprehension of art is the study of these monuments themselves. No two objects of attention can well be more different than a relation and the objects between which it holds. It will be said, different as they are, knowledge of the one helps to a grasp of the other. True, to the abstract recognition of one or other perhaps unessential point. Like technical knowledge, historical knowledge offers a crutch to observation. It may direct the eyes that need directing; and it may also direct them to no material advantage. Professor Adolf Philippi writes: "First see, then read—for those who need reading, and many never need it at all." Professor Carl Neumann advises to the same effect. "The historical understanding of a work of art is advanced when we look at it in connection with other works of the same master and time, and of earlier and later times; its artistic understanding is advanced hardly a step by the process—at most in that the comparison and contrast of different works sharpens and trains the eye." And again, "How often is one asked— * * * 'What art history is to be recommended in order to awaken an understanding of art?' But one answer can be given. 'No art history at all. The way to art lies though the individual artist.'" [1] Comparing the content of a work of art with the influences it represents, Professor Justi writes: "The more one grasps this worth—incomparable, and independent of all historical connections—the further are removed these side issues." [2] Of the dependence of Leonardo on Verrocchio, Mr. Berenson writes: "Would the full realization of this dependence help us to appreciate and enjoy Leonardo as an artist? No, for the term "artist" from the aesthetic, the only point of view we may admit, signifies nothing more nor less than a summation of works of art; and unless we have enjoyed and appreciated these, much though we may know about the man, his manners, his environment, his temperament, his anything you please, we shall know nothing of the artist." [3] For we shall know only things related to his work, not the work itself; and in the process of relating them to it, joy in the work—the essence of its comprehension—evaporates. Théophile Gautier wrote: "The necessity of analyzing everything has made me necessarily and irremediably sad." [4] As the history of art is actually taught in books and lectures, its only serious value for the understanding of art begins when it ceases to be art history and becomes

[1] Carl Neumann. Rembrandt. Preface.
[2] C. Justi. Velasquez. II, p. 271.
[3] Bernard Berenson. Drawings of Florentine Painters. I, p. 35.
[4] Letter to his daughter, quoted in the Figaro, 1888.

comment on one or another individual work by one or another master—in a word, criticism.

For instruction by criticism is the essential element in the teaching of artistic understanding, and should be the predominating element in popular education in fine art. Criticism in no degree hostile, be it said; for in reality there is no such thing as hostile criticism. A hostile critic is a contradiction in terms; as if one should speak of bloody ermine. The sentence of Goethe just quoted from M. Paul Bourget is an unassuming rendering of the magnificent words of St. Paul, "Though I speak with the tongues of men and of angels and have not love, I am become as sounding brass or a tinkling cymbal." Sainte-Beuve, the master critic of the France of a generation ago, often quoted with approval a sentence of Joubert: "The charm of criticism is the penetration into other spirits."[1] The true critic is an *alter ego* of the artist; loving his work as the artist himself loves it, if no less conscious of its imperfections. He is the ideal beholder, and it is from him that all effective training in beholding must come. On him the whole fabric of popular education in art must rest. To amplify the problem of Aristotle, How can we win the people to delight in noble art of every kind? Not by technical training beyond the rudiments, nor by the history of art; but by leading them into the presence of noble art in the company of those who themselves delight in it. M. Anatole France describes the rare joy of "visiting some old and magnificent monument in company with a savant who happens at the same time to be a man of taste and intelligence, capable of thinking, seeing, feeling, and imagining."[2] Prof. Lichtwark, recounting his experiments with school children in the study of pictures, writes: "Whoever does not heartily enjoy art had better leave this kind of instruction for others. As well might a person who does not care for music give music lessons."[3] M. Emile Faguet has this type of education in mind when he writes: "Taste can not be imparted, I repeat. * * * Nevertheless, if one can not instruct others to have taste, one can show taste in the presence of others and incite them to give proof of it. * * * Only incite them, it is true, but strongly incite them. * * * Contact with, and even shock, from a man of taste, rouses, stimulates, vivifies, sets in motion those capable of taste. * * * This is not instruction, but intercourse; an intercourse not giving taste, but accustoming and inspiring others to have it."[4] No better instances of what M. Faguet proposes could be given than his own studies in literature. They illustrate in perfection what Matthew Arnold has called the highest office of the

[1] J. Joubert. Pensées. p. 327.
[2] Anatole France. La Vie Littéraire. II, p. 28.
[3] Alfred Lichtwark. Exercises with a class of school children in looking at works of art. Dresden. p. 27.
[4] Emile Faguet. L'Esprit de la nouvelle Sorbonne. Revue des Deux Mondes. Apr., 1911.

critic. "Surely the critic who does most for his author is the critic who gains readers for his author himself; gains more readers for him, and enables those readers to read him with more admiration."[1] So Stapfer compares the critic to Mercury—"the gods' interpreter to men."[2]

Chosen companionship in beholding is the corner stone of an effective popular education in fine art; a corner stone as yet left aside in our educational system. Its accredited surrogates are still, in the main, instruction in the technique and history of art; plainly because of two great practical difficulties in the way of instruction in its understanding. The capacity of appreciation is limited in every one, among teachers by profession no less than others; and—in part for physiological reasons—narrowly limited among the young. Those who instruct in the technique and history of art throughout the land would be more than human could they warmly respond to more than a fraction of the creations of the arts they represent. Again, works of fine art are the product of brains full grown and fully furnished, while the nerve centers of adolescents are but partly developed, nor has experience of life cut the nervous channels where are stored the materials of fancy, and through whose excitation alone the beholder becomes an *alter ego* of the artist. The fire is insufficient in the teaching body and the materials to create a blaze in the body taught. A wide training in the comprehension of fine art calls for teachers far beyond the ranks of the profession; and for disciples far beyond the roll of our schools and colleges—in every age and occupation. To be really popular, education in fine art must be organized mainly as an addition to our existing machinery of instruction. Its task will be to offer to the whole population, old and young, the opportunity to contemplate works of art in the companionship of persons to whom these particular creations make special appeal. Such a system would proceed by the formation of classes for the study of public monuments of art, of the works of literature in our public libraries, of the pictures and sculptures in our public galleries and museums of art, of current concert programs, or operatic and dramatic performances. It would act through a corps of amateurs of art, in the true and etymologic sense, each choosing the sphere of his predilection, and held to no service beyond. So organized, the whole available culture of the nation would be enlisted in the cause of its own extension.

V. CULTURE.

What is the meaning of this often-used and often-abused word "culture"? Lord Rosebery has just called culture "the intelligent

[1] Preface to his selection from the poems of Byron.
[2] P. Stapfer: "Shakespeare et l'Antiquite."

enjoyment of literature," or, as we may interpret him, such an enjoyment as corresponds to the intention of the writer. He was speaking in a library, or would, we may believe, have included fine art in any of its manifestations. So amplified, the phrase would run "the intelligent enjoyment of works of the imagination." The definition given by Matthew Arnold implied a similar limitation and conveyed the like idea. Culture is "to know the best that has been thought and said in the world";[1] not to know it abstractly, but "to feel and enjoy" it "as deeply as ever we can";[2] tasting its sweetness as well as opening our eyes to its light, in the two words of Swift made famous by Arnold himself a generation ago. In culture we cross the line between the real and the ideal; between our fortunes and our preferences. We cross the line also between the formation of capacity and its exercise; passing from preparation to fruition, from life for the sake of something else to life for its own sake. Returning to President Hadley's definition of education in the broad sense—"any activity which we value not for its direct results, but for its indirect effects upon the capacity of the man who is engaged therein," culture appears as its complementary opposite—an activity which we value not for its indirect effects upon capacity, but for its direct results. It is the acceptance of an imaginative joy given us for its own sake by a man endowed with the rare power to offer it. It is that activity of the spirit which we have here learned to call the ideal beholding of a work of art.

Of this ideal beholding some of our latest visitors from Europe tell us we of the United States do exceedingly little. Concerning his American students in French literature Professor Lanson writes: "Whenever I offered them a subject of study, they said to me at once 'What must we read?' and when I answered 'The text of your author' I could notice that they were a little surprised, that the direction seemed meager to them"—an attitude due, as Professor Lanson finds, at once to "an unskillful application of erudition" and a complete absence in American instruction of the exercise called in France "the interpretation of texts."[3] Mr. Lowes Dickinson writes: "In America there is, broadly speaking, no culture. There is instruction; there is research; there is technical and professional training; there is specialism in science and in industry; there is every possible application of life to purposes and ends, but there is no life for its own sake."[4] The indictment is true. It is only in speaking narrowly and having regard to sporadic instances, largely unacknowledged, that life in the imagination for its own sake can be said to exist in the United States. What commonly passes for

[1] Literature and Dogma.
[2] Introduction to Ward's English Poets, p. XXII.
[3] Gustav Lanson: "Trois Mois d'Enseignement aux Etats Unis, p. 157.
[4] G. Lowes Dickinson. "Culture." The Cambridge Review, No. 18, 1909.

culture among us is at best only instruction; not the activity of apprehending and feeling ideals, but the activity of trying to prepare for such an apprehension and feeling. Since it is possible to try to enjoy all types of creative fancy, though wholly impossible for any one to succeed in more than the appearance of enjoying them all, a single narrow interest—that of appearing interested in things of the spirit—has usurped the place of the infinite variety of interests which the spirit can genuinely nourish. Instructed, the classes which represent culture among us are; but not, as classes, cultivated. Lowell called the people of this country "the most common-schooled [it might now perhaps be added, the most college-bred] and the least cultivated people in the world." As a people we sorely need to realize that culture is not a making ready for life in the future but a practice of life in the present; not work but play; not tepid and supercilious but warm and gracious; not the issue of spiritual notes ostensibly payable on demand, though always in the event extended, but the payment of a specie of the soul, as occasion calls. The world position which the United States has assumed within recent years makes the duty of an international culture—of a penetration of the spirit of other peoples, a recognition of their ideals, and as far as may be a sharing in them—our instant duty. This patriotic obligation will be sooner met, we shall sooner take our place with intelligence and sympathy at the council table of the powers, if we clearly realize that it is of a piece with the real significance of the common phrase—the appreciation of fine art.

The efforts which hitherto in the United States have represented popular education in fine art in the sense of a training of the public have been, in large measure, individual and difficult to follow like the culture which they presuppose. In our colleges and universities men honored in American letters have sought by special courses of instruction devoted to masterpieces of literature to impart to students a vital understanding of these works. The lectures on Dante given by Lowell at Harvard taught many receptive minds what the comprehension of a great poem really involves in thought and feeling; and not a few among living writers and critics are accomplishing like results for the present generation. There has also existed in schools during recent years a marked tendency to lay stress on the study of individual works of literature with a view to their understanding.

A truly popular education in two other fine arts has been undertaken by organized effort within recent years, also originating within Harvard University. A series of chamber music concerts is given each year at Cambridge, the performances being accompanied by explanatory comments. The Drama League of Boston seeks by various means to develop an appreciative public for good plays performed in that city. These and similar movements elsewhere

constitute a new factor in public instruction aiming directly at intelligent enjoyment.

Within the field of art, narrowly so-called—meaning painting, sculpture, architecture, and their minor derivatives—the public-school art leagues formed within recent years in various cities represent a kindred purpose. Besides promoting artistic decoration of school buildings, they often provide instruction looking to the appreciation of art. The department of visual instruction of the New York State Education Department illustrates another form of the like endeavor. An important branch of the activity of women's clubs, as well as of many private classes, aims at instruction, largely mutual, to the same end. The widespread present movement to promote civic art, in aiming to utilize the opportunities for imaginative creation presented in our public buildings and parks, promises to contribute effectively to the artistic education of the people. The gift of the Ferguson and Samuel funds for the plastic decoration of public places in Chicago and Philadelphia are benefactions marking an epoch in this country—its first conspicuous foundations wholly devoted to the general culture. The recent creation of municipal, State, and National art commissions tends in like manner to foster the interest of the whole people in the tangible arts, and offers the occasion for effort to make this interest more intelligent.

Within a few years museums of art throughout the country have begun active efforts to forward the popular understanding of their contents. In 1903 there was held at Mannheim in Germany a congress of museum officials to deal with the question: How shall our museums be made more useful to the people at large? An important section of the proceedings was devoted to reports from classes held in German museums in previous years. These were in the main unofficial, the lecturers acting by the consent but not with the authority of the museum administration. Such a volunteer effort had several years previously been permitted at the Museum of Fine Arts in Boston. During several months of 1896 representatives of the Twentieth Century Club of that city, acting under the supervision of an officer of the museum assigned to the duty, met visitors to the museum on Sunday afternoons for the purpose of giving them information about the collection of plaster casts shown. It remained for the museum to make the effort official, and this step was later taken. In 1907 the museum itself began a similar service covering all its collections—the first museum of art, as it appears, to offer its visitors the personal aid of its officers in the appreciation of its exhibits. The new opportunity was called the Docent service of the museum and was made free to all. Its aim was not to give random information but interpretative information about the collections—information which should help the spectator toward getting from a

picture, statue, or work of minor art the full impression the artist intended it should make. Docent service thus illustrates popular education in fine art in the exact sense already advocated above. Its presupposition is a sympathetic understanding of the work shown on the part of the speaker about it; and to insure this all the specialists at the Boston Museum and many other selected persons have borne their share in the instruction, each within the limits of his choice. The visitors, old and young, individuals, groups, and school classes, annually met in this way in the galleries have rapidly increased in number since the service was established and are now counted by thousands. Personal guidance of some kind may be said to have since become a recognized duty of American museums of art. The Metropolitan Museum of Art in New York, the Art Institute in Chicago, and others of our chief museums later offered their visitors the services of a representative specially assigned to the instruction of visitors, and the newer museums are accepting the duty of guidance as an indispensable means of influence. In England, in pursuance of a suggestion offered in 1910 by Lord Sudeley, an official "guide-demonstrator" was in 1911 appointed at the British Museum, and the system is at present under consideration at the National Gallery and other museums of art in London. A press notice of the suggestion remarks upon "the fact that for the past two years such a system has been in operation at the Metropolitan Museum in New York and for a longer time at the Boston Museum." Professor Réau, in France, writes that it is their "constant attention to popular education that forms the chief originality of American art museums," the official recognition of the duty "being almost wholly unknown in the museums of France and Germany." [1] It would be vain to hope, he writes again, that the words of a Docent "however eloquent, could transmit the sense of beauty to those who have not been endowed with it. But he will be able in analyzing a work of art to train the eyes of the people and teach them to see better." [2]

The question presents itself—why may not a similar effort be made by public libraries? Like museums they are guardians of a treasury of the imagination, although, unlike museums, they do not display their treasures. Yet why should they not—*mutatis mutandis*—interpret books to the public as museums are beginning to interpret exhibits? Why must people always read books to themselves? Why should not public libraries read books to them? President Wilson has written: "The chief and most characteristic object of library endeavor is to get men to read the best books and into the habit of reading." [3] The direct means to this end is to offer the

[1] Louis Réau: L'Organisation des Musées; Les Musées Américains. Revue de Synthèse historique, 1909.

[2] Louis Réau: Musées Américains. La Chronique des Arts, December 24, 1910, No. 39, p. 308.

[3] Report for 1906 as president of Princeton University.

public interpretative readings from these books. This our public libraries should do through official representatives just as our museums are offering official companionship in seeing their pictures and statues. The Docent system demands to be extended to libraries. The names of many famous men who have said things better than they have ever been said since are inscribed on many library walls. There is Taylor, "the Shakespeare of divines." Who ever reads a page of him? Who ever reads nowadays even the most conspicuous English classics like Utopia or Amelia or Dr. Johnson's Tour in the Hebrides? How many even among college graduates read a play of Shakespeare once a year? Poetry does not exist as the poet intended until read aloud, until the actual sounds he fancied strike upon the ear. To most people it always remains a wraith of its real self. No impracticable talent is needed, no Fanny Kemble or Charles Dickens, but simply an intelligent man or woman with a pleasant voice such as every educated circle can show; and no large lecture hall, but an apartment or alcove where a small group could gather without disturbing others. An enjoyable and profitable acquaintance with a book can in many cases be given on a single occasion by appropriate extracts connected by comment; and for larger works a series of readings might be arranged. A special reading-room or special reading-rooms might be a part of the plan of the library building, and a special corps of official readers—Docents in literatue—made an adjunct of the library force. The schedule of readings might be duly laid out as a part of the library work and duly advertised as a part of its facilities. The entering wedge has already been provided in the story-telling courses for children now arranged by many of our libraries; but these courses do not give literature itself but only paraphrases of literature, and are not for adults but for the very young. We need to return to the ancient method by which the Iliad and the Sagas passed from mouth to mouth, before the art of printing had made the enjoyment of literature solitary and voiceless. To their original function as custodians of the written word, our public libraries have within a generation added that of its active advocates. Let them now add another—that of organs of its public utterance.

A final ambiguity in the use of the over-burdened word education brings the number of its familiar meanings to ten. The modification of personality either pure and simple (the loose sense) by improvement (the broad sense) by teaching (the narrow sense) or by schooling (the narrowest sense); either as process or product, make up eight meanings; and the processes of teaching and schooling in their two acceptations of the contribution of the pupil on one side and the teacher on the other, complete the ten. Professor Gildersleeve warns us that "Education is the normal development of the powers that lie in man's nature, and is not to be confounded with instruction,

which merely furnishes the means and appliances of education." [1] There is on the one hand the actual development of capacity in the taught, and on the other simply the use of means toward this aim, apart from success or failure. In the one sense education means the activity of learning, in the other the activity of teaching. The question "Does education really educate?" signifies by the noun the share of the instructor, and by the verb the share of the pupil. The distinction has been wittily expressed in a new rendering of an old proverb: "You may send a boy to college, but you can not make him think." The sending of our whole people to a college of culture added to our present educational system might still do little to make them think. Let it suffice us to be assured that what little it should do would be well worth the pains. Professor Nash has said: "We men and women of to-day are standing on the verge of a future whose course it is impossible to foresee. If we are to play our part through, if we are to follow our duty home, we need both a cool head and a warm heart. The geologian deals with aeons as an oriental monarch with his people's gold. To the impassioned reformer a year is an age. The need of our time is a manhood that shall gain a little—just a little—of the geologian's time-sense." [2]

[1] Basil L. Gildersleeve, "The limits of culture," Essays and Studies, p. 13.
[2] Henry S. Nash. Genesis of the Social Conscience, p. 2.

CHAPTER XIII.

EDUCATIONAL WORK OF AMERICAN MUSEUMS.

By Paul Marshall Rea,

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Contents.—Number of museums—Genesis of museums—College museums—Museums of learned societies—Public museums—Museum cooperation with public schools—Traveling school exhibits—Children's museums—Museum cooperation in industrial training—Conclusion.

NUMBER OF MUSEUMS.

There are in the United States approximately 600 museums,[1] of which about 50 per cent are devoted exclusively or chiefly to natural science, about 25 per cent to history, and about 10 per cent to art. The remaining 15 per cent are devoted to special or to miscellaneous subjects.

Approximately 38 per cent of these museums derive their financial support from schools, colleges, or universities; 35 per cent from societies or associations; 15 per cent from city governments; 7 per cent from private individuals or endowments exclusively; 4 per cent from State governments; and 1 per cent from the National Government.

These statistics do not indicate the relative importance at the present time of the subjects treated by museums or the importance attached to museums by the various organizations which support them. The value of museums depends, not upon numbers, but upon the efficiency with which they serve the purposes of the supporting organization. This is a matter of judgment in every case and can not be determined mathematically, but the amount of money appropriated annually for the museum is the best indication of the value placed upon it by those who support it. Financial statistics are difficult to obtain, especially from institutions which give inadequate support to their museums, but such as are available indicate certain significant conditions. Thus, 27 academies, colleges, and universities reported in 1910 total appropriations of $14,671 for museums, while the same number of municipal[2] museums received a total of $980,900. Only

[1] These statistics are based upon the Directory of American Museums, published for the American Association of Museums by the Buffalo Society of Natural Sciences in 1910.

[2] The term "municipal museum" is here applied to museums which receive all or most of their maintenance from city governments, even though not actually owned by the city.

five colleges or universities gave more than $1,000 to museums, while only one municipal museum received less than $1,000. Ten societies and associations reported museum appropriations from general funds to the amount of $38,309, but only five of these gave more than $1,000. Fifteen State museums received $138,650, and 16 privately endowed museums had an aggregate income of $778,727.

Comparing the number of museums of each class which reported their income with the total number in the country, we find that reports were received from more than half of the State museums, nearly half of the endowed museums, one-third of the municipal museums, and only one-eighth of the college and university museums. In the last class the most common report was "Maintained from the general funds of the college," or "Variable and irregular appropriations from college funds." It is probably safe to say that very few of the college museums which did not report their income receive more than $500 a year. Although a few museums under control of colleges or universities or of societies or associations have endowments sufficient to insure their maintenance, the great majority are inactive and deteriorating, while the municipal and State museums are growing in numbers, size, and usefulness, and are receiving increasing appropriations of public moneys and contributions from private sources. The contrast is shown in a summary of the average incomes of the museums whose statistics are available. Thus, college and university museums receive appropriations averaging about $500, and an average income from all sources amounting to a little over $6,000; museums supported by learned societies receive appropriations averaging $383, and incomes of a little over $8,000 from all sources; State museums, from appropriations almost exclusively, $9,330; museums dependent upon endowment and miscellaneous sources, $48,670; and municipal museums, from city funds, $41,515, and from all sources, $51,878. These figures would be very much smaller were it not for the large incomes of a very small number of very wealthy museums.

GENESIS OF MUSEUMS.

A further important aspect of the classification used above is revealed by the dates of founding of museums of the various classes. The two oldest museums, that at Charleston, S. C. (1773), and the East India Marine Society Museum (now a part of the Peabody Museum), at Salem, Mass. (1799), were both founded by societies. The former was designed to afford a complete representation of the natural resources of the Province of South Carolina and their relation to commerce and industry. The latter was a repository for the curiosities gathered by the ship captains of Salem from distant parts of the world.

The first half of the nineteenth century gave rise to a number of museums in connection with both learned societies and colleges. Among these may be mentioned the Pennsylvania Academy of Fine Arts (1805), the Bowdoin College Art Museum (1811), the Academy of Natural Sciences of Philadelphia (1812), the Allegheny College Museum (1820), the Boston Society of Natural History (1830), the Wesleyan University Museum (1831), and the Portland Society of Natural History (1843). The beginning of the United States National Museum, in 1846, marks the culmination of the museum development of the period.

COLLEGE MUSEUMS.

The founding of science museums by colleges and learned societies was a natural expression of the interest of the time in descriptive natural history. The displacement of that interest by the biology of the succeeding half century, with its emphasis upon laboratory studies in morphology and embryology, is the fundamental reason for the large number of neglected and inactive college museums to-day. The teacher of biology under present conditions requires small synoptic series of specimens for demonstration, but seldom has either time or inclination for the care and increase of general systematic collections, while the elaborate technique of the large public museums is entirely beyond his power. In a few large universities great museums of the highest value to research are firmly established, but the security of their foundation consists in endowment funds. A conspicuous example of this type is the great Museum of Comparative Zoology at Harvard, founded by Louis Agassiz in 1852. In 1858 the corporation of Harvard University began to make a small monthly allowance for the care of the collection, but its development has been chiefly due to a grant of $100,000 obtained by Prof. Agassiz from the Legislature of Massachusetts in 1859, to subsequent State appropriations amounting to $193,500, and to private endowment. It is now supported by the income from an endowment of about $600,000. The Fogg Art Museum at Harvard is also supported solely by the income from private endowment.

From the deplorable condition of the great majority of college museums of natural history, from the small amounts of money appropriated by the colleges for their maintenance, and from the high quality of work in natural science done by colleges which have no extensive museums, we are forced to conclude that a large scientific museum is not essential to college work as at present conceived, and that the proper maintenance of such a museum is a burden which few colleges will carry. Where other funds can be utilized these museums may do valuable educational work under the general auspices of the college, but the demand for such work must usually come from out-

side the college. It is not questioned that some use of museums is made by college instructors in their class work, but equal results could usually be attained by comparatively small study collections, and the maintenance of extensive display collections is a luxury. On the other hand, large endowed museums in association with universities undoubtedly constitute an important aid to research, and as such are highly valued.

College art museums are frequently nothing more than miscellaneous collections of portraits and objects of art valued for decorative purposes rather than as a basis for instruction. They seldom have any regular income, and more rarely a curator. The Farnsworth Museum of Art is a notable exception, receiving its support from the general funds of Wellesley College, supplemented by an endowment for the chair of art. It is extensively used by students in the art department. The Fogg Art Museum, already mentioned, is enabled by its endowment to carry on highly organized instruction in connection with the art courses in Harvard University. The relation of the art museum to university instruction has been discussed by the director of the Fogg Art Museum in a paper before the American Association of Museums.[1] The art museums at Beloit, Bowdoin, and Smith Colleges are also adequately maintained by reason of endowment and are actively utilized.

MUSEUMS OF LEARNED SOCIETIES.

The status of the museums supported by scientific societies differs somewhat from that of college museums. It has already been stated that both these classes of museums were an expression of the interest in descriptive natural history which characterized the first half of the last century and continued until about 1870. After that date comparatively few of these museums were established. Scientific interest passed to problems of structure and function, and we have traced the disastrous effect of this change upon the support of college museums. The scientific societies, however, retained in their membership a large proportion of systematists, whose work has been invaluable in extending and arranging descriptive biological information, and whose collections have enriched the museums of their societies. It is only necessary to mention the Academy of Natural Sciences of Philadelphia and the Boston Society of Natural History, whose publications and collections are the indispensable record of the progress of American science. The most successful of these museums derive their support in about equal proportions from the general income of the society and from endowment. Generally

[1] Forbes, E. W. The relation of an art museum to a university. Proc. Am. Assoc. Mus., V, 1911, 47–55.

speaking, the maintenance of their publications and study collections absorbs most of the regular income and renders difficult the educational work necessary to make a great popular museum.

The neglected condition of college museums and the restriction of society museums to highly technical work combined to create in the popular mind the still prevalent conception of a scientific museum as a more or less dusty storehouse of interminable rows of bugs and rocks and "stuffed" animals as far removed from real life as the mummies it contains. The first century of American museums (1773–1873) was thus marked by the flood and ebb of a great popular interest in museums as centers of recreation and instruction. There was at the end, however, a rejuvenation of the museum idea already discernible.

PUBLIC MUSEUMS.

The greatest and most active museums of America to-day, with few exceptions, have originated within the past 50 years and have had their phenomenal development within 25 years. A few examples may be given: American Museum of Natural History (1869); Metropolitan Museum of Art (1869); Museum of Fine Arts, Boston (1870); New York State Museum (1870); Pennsylvania Museum (1876); Art Institute of Chicago (1879); Milwaukee Public Museum (1882); Brooklyn Institute of Arts and Sciences (1889); Field Museum of Natural History (1894); Worcester Art Museum (1896); John Herron Art Institute (1896); Carnegie Institute Museums (1896). Most of these museums are of a new type, being founded and supported either by private endowments or by municipal or State funds. There is a marked decrease in the number of new museums founded by colleges or by technical societies, and museums are henceforth significant as public institutions.

The conception of museums as storehouses of technical material, of interest principally to specialists, has been broadened until the primary object has become visual instruction. Many researches are best conducted in museums, but the expenditure of public funds is justified only by making the institution of practical benefit to the general public for recreation and instruction. To this end an astonishing degree of technical skill has been applied, and the success of the result is evidenced by the continually increasing amount of public and private money devoted to the extension of museum work. The motto of the American Museum of Natural History, "For the people, for education, for science," expresses the ideal of the modern museum.

A similar change of policy on the part of art museums may be noted. Until recently these museums have been content to exhibit objects of art in as harmonious settings as possible. It was assumed

that the significance of these objects would be evident to the visitor in proportion to his degree of artistic perception. The function of the museum was not conceived to include the education of the artistic sense of the visitor. To-day art museums are endeavoring to diffuse information about art and to develop appreciation of art in the general public.

The introduction of the educational function into museums is the keynote of their phenomenal development in the past quarter century. They are now democratic in the highest sense, responsible directly to the people and developing in proportion as they satisfy the needs of the people.

No account of this great change in the purposes and methods of museums would be complete without a tribute to the genius and clear vision of G. Brown Goode, assistant secretary of the Smithsonian Institution in charge of the National Museum from 1887 until his death in 1896. Through both his administration of the National Museum and his peculiarly trenchant papers on museum subjects he exerted the influence of a great pioneer in the creation of the modern conception of public museums.[1] His paper on "The Principles of Museum Administration," read before the Museums Association of Great Britain in 1895, is the first formulation of a general theory of administration, while his lecture on "The Museums of the Future," delivered before the Brooklyn Institute of Arts and Sciences in 1889, is a prophecy already abundantly realized. He says:

> The museum of the past must be set aside, reconstructed, transformed from a cemetery of bric-a-brac into a nursery of living thoughts. The museum of the future must stand side by side with the library and laboratory, as a part of the teaching equipment of the college and university, and in great cities cooperate with the public library as one of the principal agencies for the enlightenment of the people.

Among other aphorisms which we owe to Dr. Goode, and which have been frequently quoted, we may cite the following:

> The public museum is, first of all, for the benefit of the public.
>
> An efficient educational museum may be described as a collection of instructive labels, each illustrated by a well-selected specimen.
>
> A finished museum is a dead museum, and a dead museum is a useless museum.

Broad as was Dr. Goode's view of the educational functions of the museum, he was more interested in the instruction of the general public than in cooperation with schools. He says:

> I should not organize a museum primarily for the use of the people in their larval or school-going stage of existence. The public-school teacher, with the illustrated textbook, diagrams, and other appliances, is in these days a professional outfit which is usually quite sufficient to enable him to teach his pupils.

[1] See Memorial of G. Brown Goode, U. S. Nat. Museum Rep., 1896–97.

School days last, at the most, only from 5 to 15 years, and they end with the majority of mankind before their minds have reached the stage of growth most favorable for the reception and assimilation of the best and most useful thought. Why should we be crammed in the times of infancy and kept in a state of mental starvation during the period which follows—from maturity to old age—a state which is disheartening and unnatural, all the more because of the intellectual tastes which have been stimulated and partially formed by school life.

SUPPORT OF PUBLIC MUSEUMS.

Of the various methods of museum maintenance the most successful at the present time are those which depend upon public funds and private endowment. The organization of the American Museum of Natural History in New York City embodies principles which are being generally adopted in municipal museums. The clearest statement of these is contained in an address before the American Association of Museums by Dr. Henry Fairfield Osborn, president of the American Museum.[1] He says:

> The radical feature of our organization, which has been demonstrated to be almost ideal, is this: The city intrusts the government of the museum entirely to a board of self-perpetuating trustees. It provides the building and contributes a certain proportion of the maintenance. The trustees obligate themselves to present to the museum all the collections, to conduct all the scientific work, the publications, explorations, and everything of that kind. Thus, the heating, lighting, and actual care of the collections is supported by the municipality, but the collections themselves are the gift of the citizens of New York.
>
> You will see at once that this insures an interest on the part of the individual citizens in the growth of the museum which can not be secured in an institution governed wholly by the city.

As a result of this plan of organization, many museums which receive their maintenance chiefly from municipalities have large and increasing endowments and obtain contributions from private citizens for many of their activities.

Museums supported exclusively from private endowment have no responsibility to the public, and are obligated only to administer their trust funds in accordance with the conditions imposed by the donor. The endowment of museums, however, is evidence of broad culture and a desire to benefit the public. Such endowments, therefore, are seldom so restricted as to prevent their use for educational work through the museum.

MUSEUM COOPERATION WITH PUBLIC SCHOOLS.

The most distinctively modern educational activity of museums is to be found in cooperation with the public schools. Probably no other subject has attracted such enthusiastic attention on the part of museum workers or yielded such large results.

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[1] Proc. Am. Assoc. Mus., VI, 1912, 1–4.

The Davenport Academy of Sciences and the Buffalo Society of Natural Sciences were among the first to organize definite cooperation with public schools. Mr. Edward K. Putnam states[1] that as early as 1877 Mr. Pratt, curator of the Davenport Museum, was endeavoring to establish a vital connection between the museum and the public schools. From 1878 to 1889 school children and classes from the public schools of the city and county came to the museum informally for lectures and demonstrations. Voluntary classes in botany and other subjects were conducted by the museum. In 1889 a formal arrangement was made with the superintendent and principals by which classes from the eighth and ninth grades came regularly to the museum for instruction by the curator. Mr. Pratt's removal from Davenport the following year resulted in a suspension of formal instruction of this character until 1902, when it was resumed and extended to include all the public schools of the city, and in addition a regular class in nature study for teachers. Since 1904 the school board has paid for half the time of the curator for this work.

Mr. Henry R. Howland states[2] that in 1872 the weekly field excursions of the Buffalo Society of Natural Sciences were composed largely of pupils from the high schools, and that when elementary science work was introduced into the grammar schools of Buffalo in 1878 the science teachers were encouraged to bring their classes to the museum and to utilize its collections and rooms for instruction. This work continued and expanded until 1905, when lectures at the museum were made compulsory. In 1908, 234 lectures were given during the school year and were attended by about 20,000 children from the fifth to the ninth grades. An additional series of evening lectures on physiology was given for grammar-school teachers and advanced pupils from the high schools. This work is in charge of Dr. Carlos E. Cummings, secretary of the society, whose time, when not lecturing, is largely occupied in preparing lantern slides and specimens for illustration. In partial recognition of this work, the city appropriates $1,000 annually to the museum.

Most of the active museums throughout the country now offer special facilities to classes from the schools. These commonly include special guides or demonstrators in the exhibition halls and the use of classrooms and material, with lectures by members of the staff on request. In art museums it is becoming customary to assign members of the curatorial staff to act as docents in the exhibition halls. These docents do not give set lectures, but endeavor to assist small groups of visitors in the study of such objects as are of interest to them. The title "docent" was first given to an official public in-

[1] Proc. Am. Assoc. Mus., II, 1908, 65. [2] Ibid., III, 1909, 75.

terpreter of museum exhibits by the Museum of Fine Arts at Boston, in April, 1907. All the officers of that museum have upon occasion acted as docents, and the opportunity has been largely used, as well by the general public as by teachers and students.

The most elaborate scheme of educational exhibits is undoubtedly that in course of development in the department of invertebrate zoology at the American Museum of Natural History. Here an alcove is devoted to each phylum of animals. At the end of the alcove the lower portion of the window space is utilized for a life-size ecological group showing the habitat of the animals whose morphology and embryology are illustrated in the neighboring cases. Thus, at the end of the Annulate alcove is shown a section of the sea bottom, with the worms and associated animals as they occur in the harbor at Woods Hole, Mass. Above the sand and mud the effect of water is produced by skillfully painted sheets of glass, through which the light filters dimly from the window. Above the water line a transparency 6 feet long shows the further side of the harbor. The animals in these groups are modeled in wax, glass, and celluloid, and every detail of the group is perfectly natural. The preliminary studies at the shore required the services of the curator, an artist, and a modeler. The construction of the exhibit occupied more than a year, and the cost was approximately $2,600.[1]

These reproductions of animal habitats are intended to bring vividly before the city child the natural world of which he may have no direct experience. From this glimpse of the life of the sea he turns to the adjacent cases and finds not only alcoholic specimens, but enlarged models of both the external and internal structure of typical members of the phylum, with abundant descriptive labels. Even university students in zoology find the study of these exhibits profitable, while to school-teachers and their classes they afford facilities never before available.

Such elaborate exhibits as those of the American Museum of Natural History, requiring a large staff of highly trained artists and the expenditure of large amounts of money, are obviously far beyond the resources of the smaller museums. The true measure of efficiency, however, is the ratio of results to resources, and in this respect the achievements of some very small museums are significant of the possibilities of museum work.

The Fairbanks Museum of Natural Science is a small, but very attractive, museum in St. Johnsbury, Vt. It is supported solely by endowment, and it is the policy of the trustees to maintain it as nearly as possible in the condition in which it was left by its founder. By virtue of its educational activity it has become an exception to the

[1] For a full description of this exhibit, with illustrations, see Miner, Roy W. Marine invertebrates in museum groups. Proc. Am. Assoc. Mus., VI, 1912, 26–30.

general truth that "a finished museum is a dead museum." Under the leadership of Miss Delia I. Griffin, director of the museum until June, 1913, it has adopted most of the successful methods of public instruction and has improved upon some of them. One of its best features is the "flower table." The following description is given by Miss Griffin in her paper on "The educational work of a small museum":[1]

The last large item of educational work to be mentioned is the flower table. From the time the first arbutus blossoms on a southern hillside until the witch-hazel lets fall its crinkled yellow petals late in the autumn a procession of wild flowers is to be seen in the museum. The specimens are arranged in clear glass vases, on tables in a prominent part of the hall. Frequently 50 specimens are displayed at a time, and often all the varieties of one flower are to be seen the same day. Last week the violet table held 12 varieties, all found within a 5-mile radius of the museum, and each September our 15 goldenrods are exhibited at the same time.

In the case of rare flowers, some of the orchids for instance, only two or three flowers are displayed, often with a note warning the public of the danger of gathering them in quantity and so aiding in their extermination. The literature of the Wild Flower Preservation Society has a place on this table, and many of its leaflets are taken by visitors.

All the flowers are labeled with both common and scientific names, and if a child brings a specimen, his name also appears. A large number of the flowers are brought by the children; many are gathered on the bird walks, and by the museum force when searching for herbarium specimens; and some of the rare contributions come from ladies, who, in their leisurely drives over the country roads of this vicinity, find these beautiful specimens.

This flower display is easily the most popular feature of the museum work. Visitors come to it first and linger by it longer than by any other exhibit; several invalids watch eagerly for the reports of it in the weekly papers; and the children, competing with each other to see which shall bring the largest number of flowers, gain a familiarity with the specimens and the fields and woods in which they grow. More valuable yet is the healthy influence which absorbs the children's minds and the love of nature to which they unconsciously grow.

TRAVELING SCHOOL EXHIBITS.

In order to obviate the loss of time and difficulties of transportation involved in bringing large numbers of classes to the museum, it is now customary to send traveling exhibits from the museum to the schools. This work is done on an exceptionally large scale by the Philadelphia Museums. Under a State appropriation of $25,000 for two years, this institution prepares a large number of portable exhibits, illustrating geography, commerce, industries, and natural history, for free distribution to more than 1,200 schools in Pennsylvania.[2]

[1] Proc. Am. Assoc. Mus., I, 1907, 139–143.

[2] For more extended descriptions of these exhibits, see: Wilson, W. P. The organization and development of the Philadelphia Museums. Proc. Am. Assoc. Mus., I, 1907, 135–137; and Toothaker, Charles R. Educational work of the Philadelphia Museums. Ibid, III, 1909, 60–63.

The value of such exhibits in stimulating the interest of students and in conveying information has led to their very general use throughout the country. Their preparation requires expert knowledge and extensive facilities for collecting material, and these the museum usually possesses, while the schools do not.

In one notable instance the board of education has established a museum, under the care of the assistant superintendent of schools, for the purpose of providing exhibits of this character for use in its schools. This is the Educational Museum of the Public Schools of St. Louis, which has been fully described by the curator, Mr. C. G. Rathmann.[1] There was no museum in St. Louis to which the board of education could apply for assistance of this character, and the exposition of 1904 afforded an opportunity of acquiring large amounts of material of the highest educational value. With this as a nucleus, supplemented by donations from other museums, the present extensive collection has been built up. The exhibits are arranged in direct relation to the courses in natural science, geography, history, reading, and art, and are grouped under the following general heads: (1) Food products; (2) materials for clothing; (3) other natural products; (4) industrial products; (5) articles and models illustrating the life and occupations of the different peoples of the world; (6) plants and models and charts of plants; (7) the animal world; (8) minerals, rocks, and ores; (9) apparatus for illustration of physics and physical geography; (10) charts, colored pictures, maps, and objects illustrating history; (11) collections of art objects and models used by the classes in drawing; and (12) photographs, stereoscopic pictures, and lantern slides to accompany the preceding groups.

The many collections under these heads are listed in a catalogue, from which each teacher makes requisitions once a week. The museum maintains its own delivery system for distributing and collecting the exhibits. Duplicate exhibits are prepared in sufficient numbers to supply the demand. In 1908 the curator reported that the museum had 1,000 different collections and 3,200 duplicates. In the first year 5,000 collections were sent to the schools; in the second year, 11,500; and in the first half of the third year, 10,000. In addition to the loan collections, which are the chief feature of the museum, it maintains (1) study exhibits for teachers, (2) an exhibit of educational material from foreign countries, (3) an exhibit of school work in St. Louis, and (4) a teachers' library of 7,000 volumes. Further details of this work are contained in Mr. Rathmann's paper, already mentioned.

[1] Proc. Am. Assoc. Mus., II, 1908, 39–45.

CHILDREN'S MUSEUMS.

The first museum organized solely for children is the Children's Museum, established in 1899 as a branch of the Central Museum of the Brooklyn Institute of Arts and Sciences. The trustees—

> expressed their purpose to form an attractive resort for children, with influences tending to refine their tastes and elevate their interests; to create an attractive center of daily assistance to pupils and teachers in connection with school work; and to offer new subjects of thought for pursuit in leisure hours.[1]

Miss Anna Billings Gallup, the curator under whose direction this interesting experiment has been so successfully developed, describes the plan of the museum as including (1) the preparation of collections which children can enjoy, understand, and use; (2) an arrangement of material pleasing to the eye and expressive of a fundamental truth; (3) briefly descriptive labels expressed in simple language and printed in clear, readable type; and (4) a system of instruction which children will voluntarily employ. Space forbids detailed description of the many unique and suggestive exhibits and activities of this remarkable museum, but the successful appeal which it makes to children is abundantly indicated by the statistics of attendance. The average annual attendance is 102,000, including an attendance of 18,700 on lectures. As many as 500 children have presented themselves for admission to a lecture room with seating capacity for only 60. At such times the lecture is repeated again and again, while children wait patiently in line for admission. A new building, to cost approximately $175,000, is about to be erected by the city for the accommodation of this museum.

A new children's museum is now being organized in Boston, in charge of Miss Delia I. Griffin, whose work at St. Johnsbury has already been referred to.

In addition to these museums established solely for children, mention should be made of the children's room in the Smithsonian Institution at Washington. This room was set apart and equipped under the immediate supervision of the Secretary in 1900 or 1901 "for the benefit of very young people, their entertainment rather than instruction, as an attractive means of inculcating a love for nature." The exhibits comprise:

> (1) A series of familiar American birds; (2) common European birds; (3) large birds of prey; (4) interesting water birds; (5) curious birds, such as the crocodile bird, kiwi, etc.; (6) some brilliant-colored birds; (7) curious nests and eggs; (8) a series of specimens with accessories representing protective mimicry, under the caption, "How creatures hide"; (9) remarkable insects; (10) bright-colored shells; (11) other interesting invertebrates; (12) remarkable minerals.

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[1] Gallup, Anna Billings. The work of a children's museum. Proc. Am. Assoc. Mus., I, 1907, 144.

MUSEUM COOPERATION IN INDUSTRIAL TRAINING.

The rapid increase of vocational training and industrial work in public schools is already creating a demand for further assistance from museums, which they are meeting by lectures on the relation of natural resources to commerce and industry and by exhibits illustrating processes of manufacture. It is altogether probable that this is but the beginning of a phase of museum work which will ultimately occupy a large place in the activities of general museums and lead to the establishment of special industrial museums. The need of industrial museums was urged before the American Association of Museums in June, 1913, by Prof. Franklin W. Hooper, director of the Brooklyn Institute of Arts and Sciences.[1]

CONCLUSION.

The history of American museums during 140 years shows that four sources of support have been generally used: (1) Learned societies; (2) schools, colleges, and universities; (3) private endowment; and (4) municipal, State, or National funds. The first of these leads to museums of high technical value, but requires supplementary endowment for the best results. These museums are seldom able to compete with municipal museums in public instruction or in cooperation with public schools. The second source of support is responsible for the largest number of existing museums. They are valued less in college instruction to-day than they were in the first half of the last century, and rarely receive adequate support unless aided by endowment. Their condition is seldom satisfactory, and often pitiable. The third source of support is the foundation of some of the largest and most influential modern museums. It also supplements in a very valuable way the income of museums primarily dependent upon other funds. The fourth method produces the most active and progressive museums of the present time, because the continuance of appropriations is contingent upon work of such broad scope and practical nature as to maintain the interest and approval of the general public. The most successful element of this work, and the one which has been most effective in obtaining both public and private funds, is the educational feature. This is the fundamental idea in modern exhibition, and it is supplemented, first, by organized public instruction through lectures, publications, and field excursions; and, second, by cooperation with schools. The latter includes the provision of special facilities in the museum for teachers and students, and the circulation of a great variety of portable exhibits among the schools in direct relation to their courses of study.

[1] Proc. Am. Assoc. Mus., VII, 1913.

CHAPTER XIV.

LIBRARY ACTIVITIES DURING 1912–13.

By Miss M. E. Ahern.

Secretary of the American Library Institute, Chicago, Ill.

Contents.—National aid—State aid—Traveling libraries—Package libraries—Library legislation—Cooperation—Efficiency records and pensions—Institutional libraries—Library schools—American library association—American library institute—The public library in the commission form of government—Publications—Special collections opened to the public in 1912–13—School libraries—Widener Memorial Library—Necrology—Expansion in large cities.

Within the past year there has been a steady growth in all directions of library endeavor and a perceptible widening of the knowledge of the library as an important factor in solving the problems of education of every variety, as well as a definite aid in the various forms of business and Government activity. The year covered by the months July, 1912, to June, 1913, shows a continuance of interest in the extension of library service on the part of private donors and public officials, unceasing effort on the part of library administrators, and a truer recognition of the value of books on the part of those who come in contact with good library service.

On the whole the year has seen satisfactory progress. There still remain some parts of the country, happily growing fewer and less extended, where library service has not received the intelligent support that makes it productive, but every day sees the deadly hold of political favoritism growing slighter and an increase in appreciation of the opportunity of enlightenment offered by an efficient library.

Buildings planned for service as well as beauty, trustees chosen for fitness and ability, administrators chosen for professional standing and equipment—of all these there are inspiring examples in the activities of the past year.

NATIONAL AID.

Deep disappointment over the failure to include books in the parcel post privileges (act of Aug. 24, 1912) has caused library organization of every kind to express formal resolutions asking for remedial legislation from Congress. The American Library Association, the League of Library Commissions, and the various State and local associations

have asked that books in transit between libraries be admitted to the privilege of parcel post rate.[1]

The Library of Congress has continued to be of great assistance in general library service in issuing from time to time bibliographies on timely subjects of public interest, references on immigration, tariff, initiative, referendum, and recall.

The Library of Congress has quietly built up the valuable collections on its shelves until it has approached in value and extent many of the famous collections in Europe. Its greatest handicap continues to be lack of funds. While no large groups of printed books were presented this year, the aggregate of books and pamphlets received by private gift from many individuals and unofficial bodies was 11,256.

The following collections were acquired during the fiscal year, though not by gift: The Hoe's collection of books on the Spanish-American War; the library of the Tariff Board; the library of the National Monetary Commission; the records and books of the American Colonization Society.

Lists of references on the following subjects have been compiled under the direction of the chief bibliographer: Capital punishment; commission government for cities; conservation of natural resources in the United States; the cost of living and prices; Federal control of commerce and corporations; impeachment; the monetary question.

Other important publications of the library issued during the past fiscal year have been as follows:

The bibliography of international law and continental law. By E. M. Borchard, law librarian. 1913. 93 p. 26 cm.

Calendar of the papers of John Jordan Crittenden. Prepared from the original manuscripts in the Library of Congress by C. N. Feamster. 1913. 335 p. 26½ cm.

Journals of the Continental Congress, 1774–1789. Edited from the original records in the Library of Congress. v. 19–21. 1781. 1912. 27 cm.

Catalogue of early books on music (1800), by Julia Gregory of the catalogue division. Prepared under the direction of O. G. Sonneck, chief of division of music, 1913. 312 p. 25½ cm.

The Navy Department spends $30,000 every year in libraries for its ships. Each "ship's library" includes 300 books, usually technical and more or less expensive. A "crew's library" is usually made up of about 500 books of fiction, suitable for entertainment. About one-third of the books are replaced each year. The books are recommended by those in charge of the ships. An effort will be made to standardize the libraries.

The Federal prison libraries have been subject to investigation in the past year by a committee from the league of library commissions. Recommendations for better organization of these libraries have been

[1] This will be done by order of the Postmaster General of the United States on and after March 16, 1914.

presented to those in authority and were courteously received. A lack of funds prevents action at present.

STATE AID.

State aid to library service continues to be applied in 37 States, either through the State libraries or through the library commissions of the several States. The extent and value of the State's aid varies according to the effectiveness of these agencies. West Virginia, South Carolina, Florida, Mississippi, Louisiana, Arkansas, Oklahoma, Nevada, Montana, and Wyoming are still without official State aid. The State library associations in Louisiana, Arkansas, Oklahoma, and Montana are supplying the lack somewhat and are building up a sentiment in favor of State library service.

An honorary library commission was appointed by the governor of Arkansas as an initial step toward securing library legislation for the State.

The legislature changed the name of the Oregon library commission to State library and transferred to it 45,000 books belonging to the then existing State library, whose title was changed to Supreme Court law library.

A free library commission for the State was authorized by the legislature of South Dakota, with an appropriation of $3,000 for traveling libraries.

The Vermont commission secured legislation changing its name to Free public library commission. The legislature increased the appropriation for the commission's work $1,000. For general expenses the commission now has $3,000 and the traveling libraries $1,500. Office expenses of the commission are hereafter to be paid outside of the appropriation.

State aid through these agencies is conveyed by means of traveling libraries, library organizers, direct appropriation of money, and library schools.

TRAVELING LIBRARIES.

The traveling libraries movement of the past year has shown increased vitality and justified the expenditure made in its behalf.

Traveling library work is shaped very materially by the county-library idea. California has led in this perhaps. On account of the accidental curtailment of the funds for the State library activities in 1911, few traveling libraries were sent from the State library, and as the county library developed it was found more economical and successful as a means of book distribution. Now the books that formerly made up the traveling libraries are loaned in groups up to 1,000 volumes to counties starting free libraries. Laws permitting

county libraries are in force in California, Illinois, Indiana, Michigan, Wisconsin, Tennessee, Ohio, Iowa, Oregon, and New York.

An increase of $2,500 was voted by the legislature for traveling libraries in North Dakota, but was vetoed by the governor.

The traveling-library commission of Idaho has $8,000 for its work this year. Especial attention is given to books for juvenile readers, and special cases on agricultural subjects are in great demand.

The Massachusetts Agricultural College sends traveling libraries consisting of books and pamphlets on related subjects. About 1,000 of these books and pamphlets were loaned to 33 public libraries on request, in the form of small collections relating to harvesting, mowing, poultry, seed selecting, testing, etc. The books are primarily intended for libraries whose book funds are meager.

Missouri has an increase of 40 traveling libraries and 1,737 volumes sent out. The following statistics show the scope: Libraries sent to groups of taxpayers, 69, with 3,575 volumes; public libraries, 14, with 365 volumes; school and college libraries, 135, with 5,098 volumes; study clubs, 35, with 1,759 volumes; other organizations, 15, with 729 volumes; individual loans, 5, with 11 volumes; charitable institutions, 6, with 300 volumes. Total, 280 libraries and 11,829 volumes. The books stocked at the commission now number 11,300 volumes. Expenses: Salaries, $3,500; books and cases, $2,501; traveling and contingent, $184. There are but six counties in Missouri that have not yet received traveling libraries.

There are about 10,000 volumes in the traveling library collection of Indiana, which had a circulation of 60,171; 320 different organizations were served, and 1,261 requests were filled. Of these, 136 were schools; 232, public libraries; 409, rural associations; 257, special clubs; 114, clubs for general use; 113, groups of persons. Outlines which may be used as a basis in the preparation of club programs were sent throughout the State, accompanied by lists of books on the outlines. Twenty-one outlines were prepared on request.

In the State of New York there are now 49,897 volumes in the traveling-library collection. There are 5,706 volumes in the fixed route, the remainder are in the flexible open-shelf collection. There are 77 sets of 25 volumes each especially for children. There are 483 books for foreigners, printed in Italian, Polish, German, French, and Hungarian. The greatest demand has been for the Italian and Polish books, and next to these, the German. There were sent in response to application the following:

Number of libraries and volumes sent out.

To whom sent.	Libraries.	Volumes sent.
Taxpayers	68	3,559
Public libraries	84	5,093
Public schools	93	3,822
Study clubs	307	11,750
House libraries	127	1,247
Charitable institutions	3	300
Other organizations	75	5,412
Total	757	31,183

The largest number of libraries has been used by study clubs. There has been a steady increase in demand from groups of taxpayers. A reduction in fee has served to increase the demands from places without libraries.

Field work has been carried on mainly by the inspector and two library organizers. There are 500 libraries entitled to visitation. The number of visits has been less than 300.

There are 4,421,901 books in free libraries, and of these 71 per cent are in cities, and of the latter 44 per cent are in New York City. The free circulation in cities was 87 per cent of that of the State.

The Louisiana State Library Association, with the help of the Louisiana Teachers' Association, has undertaken to provide traveling libraries for the rural communities. There is no library commission in Louisiana.

There are 16 libraries in North Carolina supported in whole or part by town or county; 3 new library buildings were erected during the year, making 27 libraries now in homes of their own. The traveling library must be the largest factor in library work for the State, as the population of North Carolina is over 85 per cent rural. Libraries were sent last year to 66 counties, to schools or debating societies, on application signed by the principal of the school or the president and secretary of the debating society. The package library for the debating societies contains pamphlets, magazine articles, and several books on a single subject, dealing with both sides of the question. Two institutions appointed trained librarians last year, making a total of 11 in the State. Every month articles concerning libraries and library work have appeared in papers and magazines over the State. The traveling-library system will go into effect October 1, from which great things are expected.

Vermont has gained 9 town libraries and 2 association libraries, making a total of 120 libraries of all sizes. There are 246 towns in the State, some of which have two or even three libraries in their different villages. Number of towns without libraries, 56. Most of these are supplied with the commission's traveling libraries. More branch libraries than ever are doing branch work in the surrounding

district schools. More libraries are buying books for the younger children.

An encouraging increase of circulation and appropriation is reported throughout the State. The commission now does its work on $6,200 a year, of which $1,800 is given in books as annual aid to libraries in small towns and $200 in books is given to four State institutions. Towns that vote to establish town libraries may receive $100 worth of books. That appropriation this year amounts to $900. Sixteen rural schools and teachers' training classes were visited with an exhibit of the school traveling libraries and a set of pictures.

The Wisconsin Free Library Commission is organized and administered through four departments; one department engaged in establishing, organizing and maintaining public libraries; one conducting the traveling library work of the State; one an instructional department, including the Library School of Wisconsin and the legislative reference department. The library commission prepares and issues publications of special value. These include the library bulletin, book lists, and legislative reference library bulletins. The subjects covered by some of the lists recently issued are: Children's books, sociological material free or easily obtained, farm bulletins, civic advance and improvement, the monetary question, use of the library in schools, anthologies, home economics, income tax, etc. Six hundred and nine communities are served by the traveling libraries. There are 100 small communities not yet in touch with the traveling libraries.

In addition to the traveling library and the summer schools, Michigan has provided instructors for various teachers' meetings and library clubs. Exhibits of reproductions of paintings and statuary have been sent throughout the State. A traveling exhibit was taken by the State librarian on the educational train that traversed the southern peninsula, showing the exhibit through the various colleges, technical and agricultural. The library commission reports that 105,000 books were sent out in two years by traveling libraries. During the past year 125,000 books have been circulated in this State through the traveling libraries to rural schools, granges, farmers' clubs, and other associations, 900 framed pictures were loaned to schools, and 3,000 unframed pictures to women's clubs.

PACKAGE LIBRARIES.

Package libraries are the most recent development of traveling libraries. They are designed to meet the demands of students and investigators distant from a large collection of books. They contain material on serious topics only and are sent to schools, colleges, clubs, and debating societies. The subjects are usually social science, economics, good roads, conservation, morality and ethics in all phases. Package libraries are operated either through the extension division

of the library commissions or through the traveling-library departments of State libraries. Wisconsin, New York, Oregon, and North Carolina have introduced them freely.

LIBRARY LEGISLATION.

Alabama.—By the consolidation of several small municipalities with the city of Birmingham, the question of the library systems for the greater Birmingham presented itself. Several free public libraries already in operation were brought within the new city limits. In April, 1913, a comprehensive ordinance was adopted by the board of city commissioners, organizing a complete library system. This is not yet in operation (October, 1913).

Arizona.—Arizona established a system of district libraries to be under the control of the school trustees and to be free to all pupils of school age; 3 per cent of the school funds will be set aside for library purposes, and special donations may be made in addition to this.

Arkansas.—An effort to have a library commission established in Arkansas, at the last session of the legislature, did not carry. The governor, however, appointed an honorary board of library commissioners which will undertake the work of traveling libraries, furnish advice and direction in establishing public libraries, and strive to create a sentiment in favor of State supervision of library extension.

California.—The bond issue for the proposed State library building, which is to cost about $1,500,000, was approved by the legislature of 1913 and will be voted on by the people in November, 1914. The notable feature of the work in California has been the cooperation with the schools. Very largely the rural districts in the counties are becoming branches of the county free library, receiving complete library service; 55 school districts joined the county free library during the past year. The appropriation for county libraries was $176,239. Since June, 1912, four counties have established libraries. In Los Angeles County 6,600 books are sent out in the county through about ten different branches. There are now 21 county free libraries, 1 district library, 3 high-school district libraries, 127 city tax-supported libraries, 66 law libraries, 326 libraries in educational institutions. In addition there are 608 branches and deposit stations in connection with the above libraries.

Delaware.—The appropriation for the State library commission was doubled. A large part of the increase will be devoted to book-wagon routes in rural Delaware. This is a part of the traveling library work.

Indiana.—An important bill which failed to pass the legislature provided for the organization of the libraries in the State under one general law. The legislative reference bureau was separated from the State library. An appropriation of $13,500 was made for salaries

and expenses for the new bureau in addition to the appropriation previously made to the legislative reference department of the State library. The State library appropriation was increased by $4,280. The appropriation of the State library commission was increased $2,500; it will now have $12,500 annually. The library provision in the law for a commission form of government was found indefinite and unsatisfactory, and a bill was passed by the legislature fixing the number of library trustees in commission-governed cities at five and giving to them all the powers given to library trustees under the general library law of the State. The maximum of the library tax levy was raised to 5 mills for all towns. The township library-extension law was amended and now extends the benefit of free public libraries not only to townships and small towns, but to counties and school corporations. It authorizes a levy tax by any of these to carry out the provision of a contract which may be made with the nearest public library. Such contract must be for a period of five years. When a majority of the taxpayers in either county, town, small town or school corporation vote in favor of such a contract it must be made. A tax was authorized for library purposes on unplatted lands within city limits.

Indiana has 106 library buildings, of which 17 were erected in the past two years. Of 1,443,099 people who live in cities and incorporated towns, 1,005,097 are served from public or traveling libraries. Of the 1,257,700 people who live outside of incorporated towns, only 106,965 have public or traveling library service.

Kansas.—The legislature passed an act providing for the establishment of a public library in any city. Upon the written request of 50 taxpayers, the matter shall be submitted to the legal voters. The library shall be established if the majority of votes are in favor.

Massachusetts.—A bill was passed authorizing the library commission to appoint a director of library work for aliens. The commission selected Miss J. Maud Campbell, who had already been active in educational work with foreigners. The appropriation for library aid to small towns was increased from $2,000 to $4,000. State publications will no longer be sent to libraries unless requested.

Michigan.—A law was passed which requires district school officers to select books for township and district libraries from a list prepared by the State superintendent of public instruction and the State librarian.

Minnesota.—An appropriation of $500,000 was made by the legislature for the erection of a building to house the Historical Society, State law library, and the Supreme Court. The library commission will be quartered in the new building.

A law was passed authorizing any county, town, city, or village board to make a working contract with any existing public library.

The limit of tax levy was raised. Any school board may agree with the board of the nearest approved library to become a branch of said library, and shall, in case of such agreement, pay to such public library a stipulated sum for the library aid to which the school district is entitled.

Montana.—The legislature of 1913 failed to pass an act establishing a State library commission, and also a bill for county extension by city libraries. However, the larger libraries do loan books to teachers in rural schools, ranchers, and responsible people who comply with the library rules. All discarded books and such books as can be obtained by gift are given to small struggling libraries by the large libraries. The libraries in the larger towns cooperate with county workers, and books required by the teachers' reading circles are kept in most of them.

Nebraska.—A law was enacted providing for a retirement fund for librarians in cities of the metropolitan class. The establishment of township and county libraries was authorized. Several counties have already organized libraries; Lancaster County was the first.

Nevada.—A new law provides that the State board of education shall adopt lists of books for district libraries.

New Jersey.—The administration of the public school libraries of the State was transferred to the public library commission. The commissioner of education was added to that commission. One copy of every publication of the State shall be sent to each public library, including historical societies. Two foreign investigators employed by the New Jersey immigration commission are assisting the public library commission by reviewing lists, discussing the conditions and methods of the foreign population of the State, and making recommendations for future service.

North Carolina.—The State library received an increase in its appropriation, which is now $3,000 a year.

North Dakota.—The legislature placed the library commission in the budget along with the elective State offices, an act which shows the growing appreciation of the library commission. Depository stations in State institutions make the books of the commission available.

South Carolina.—School districts may use 3 per cent of the annual school tax for the provision and maintenance of libraries.

South Dakota.—An act establishing a free-library commission was passed. The State library is placed in the custody of the commission, and it is made the headquarters for the library work of the State. An appropriation of $4,000 a year was made for the commission. An act was passed providing that public libraries may be established by a majority of those voting on the question, to be

supported by a tax, not to exceed 2 mills, levied by the trustees appointed.

Tennessee.—The State board of education supersedes the State board of library commissioners, assuming all its powers and duties, except its system of traveling libraries, which has been placed under the direction of the State library. Free public libraries, as well as public school libraries, are now under the general supervision of the State board of education. State financial aid will be granted to public school libraries.

Texas.—An act providing for the creation of farmers' county public libraries was passed. Upon the petition of 100 or more legal voters, the proposition for such a library shall be submitted to the voters in the county. If the majority are in favor, libraries shall be established and organized for the purpose of gathering information on agricultural, horticultural, and kindred subjects and shall make such information available for use.

COOPERATION.

Nearly 40 of the States have library clubs which meet at least once a year; some of them meet more frequently. In addition, there are local library clubs in the large cities. These are conducted for the mutual interest of the members and for a careful study of the environments of the libraries concerned, with a view to better service and for the prevention of duplication of effort. Among those doing the most active work are the New York Library club, the Long Island Library club, Pennsylvania Library club of Philadelphia, Library club of the District of Columbia, the Rochester Library club, the Chicago Library club, the Milwaukee Library club, and the Twin Cities Library club.

The library associations, and librarians in general, are attempting to found a basis of friendly and proper cooperation between booksellers and library service. To this end, booksellers of standing are invited to address library meetings in order that libraries may understand the point of view of the bookseller; and in May, 1913, George F. Bowerman, librarian of the Carnegie Library, in the District of Columbia, gave a very comprehensive address before the American Booksellers' Association.

The organization of the Boston Cooperative Information Bureau has undertaken to bring together as complete information as possible in regard to libraries of Boston and vicinity, especially those which are noted for special collections. It is understood that this work will take on national scope if success attends the initial effort.

It is the object of the library department of the National Education Association to bring about cooperation between libraries and schools. Both in 1912 and in 1913 comprehensive and illuminating

collections of library material calculated to be helpful to the grades, to the high schools, to the normal schools, and to the colleges were exhibited at the annual meetings of the National Education Association.

The Women's Educational Association cooperates with the public library commission of Massachusetts in sending out traveling librarians. It also cooperates with the commission and the various library clubs in Massachusetts to the end that each may make its work more effective in its particular field.

The New York Public Library actively cooperates with local educational, library, and welfare associations by allowing those organizations to use the assembly and club rooms in its branch buildings for their regular meetings. This is particularly helpful to classes for the study of English by foreigners and for the meeting of foreign societies.

An important phase of cooperation is the system of interlibrary loans between universities, colleges, and public libraries in the Middle West. The universities of Illinois, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Washington, and Wisconsin; and Northwestern, Ohio State, and Purdue Universities, Adelbert College, the public libraries of Chicago, St. Louis, Milwaukee, Cincinnati, Cleveland, and Grand Rapids, and the John Crerar and Newberry Libraries of Chicago reported effective work in 1912–13. The number of volumes handled in these interlibrary loans last year was 1,748. In St. Louis the City Art Museum sent a small collection of its best recent acquisitions for exhibition in the art room of the public library.

The Drama League in various parts of the country is in close touch with the public libraries; over 73 libraries are represented in its membership and keep on file the league literature. The league has been particularly helpful in recommending plays for children and in assisting in their production locally.

Business and professional workers demand high efficiency in library service. To secure technical information with a minimum of expenditure of time and effort is a need which the library must meet. It is, therefore, the librarian's duty to place the necessary books and other material within easy access of professional and business men and yet insure the safety of all books purchased with public money. Some public libraries, in order to meet these demands, have instituted municipal reference and technical departments and collections of special material. In the municipal reference department the material is of interest to the various departments of municipalities showing what has been done in other places in the administration of municipal affairs, streets, lighting, relation of public utilities, etc. Sometimes this collection is placed in the city hall with a trained worker in charge, and sometimes it is in the library building. The following

cities have municipal reference departments in their public libraries: Brooklyn, Chicago, St. Louis, Cleveland, Fort Wayne, Kansas City, Los Angeles, Milwaukee, Philadelphia, Pittsburgh, Portland (Oreg.), Seattle. In New York City there is a municipal reference library, which is not a part of the public library proper; it was established in 1913. Special technical departments are usually for the use of the manufacturers and mechanical workers. Periodicals, reports, etc., of the various industries are collected, catalogued, and made available. Special material, dealing with civic and social problems of every kind and degree, is in many cases made available also for the use for students, teachers, investigators, etc.

In State libraries legislative reference departments are growing in numbers and usefulness. As an important division of this work, a bill-drafting department is sometimes provided, in which legislators may find assistance and information concerning the experience of other States and countries along similar lines.

Legislative reference departments have been established in Alabama, California, Connecticut, Indiana, Iowa, Illinois, Kansas, Massachusetts, Michigan, Montana, Nebraska, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Washington, and Wisconsin. Their aim is to put within convenient reach of the legislator, in classified and condensed form, information relating to the economic conditions in the other States, to the laws there in force, and to the manner in which those laws meet the conditions that called for their enactment. Their work has had a decided effect upon the legislation of the States in which they have been established.

The smaller public libraries are becoming social centers in their respective communities, particularly in industrial communities. If the library has an auditorium its influence is greatly enhanced. Reading clubs, debating clubs, or other organizations with a serious purpose are invited to utilize the library for their meetings, and are assisted as far as practicable in attaining their objects. Branch libraries in large cities are effective in bringing books into the lives of many people who otherwise would not come in contact with them.

Many college libraries are buying special collections in this country and Europe to supplement their general collections and to contribute more effectively to study and research.

Many commercial houses have established business libraries, not so much of books as of printed reports, pamphlets, etc., together with graphic material. The important part in such work is performed by the trained librarian who is able effectively to use the collection under his charge and to supplement it with special information from the technical and special collections of larger libraries. In this way the book is becoming an everyday tool for the everyday

man. The past year saw great advancement along this line in Boston, Chicago, New York, and other cities.

EFFICIENCY RECORDS AND PENSIONS.

Two important factors in the success of library service are efficiency records and pensions. It is the consensus of opinion among library administrators that municipal civil-service rules as applied to libraries are detrimental, rather than helpful. The conduct of libraries on the basis of efficiency records gives better satisfaction. In this way good service is recognized. Commensurate salaries are stimulants in securing adequately skilled service.

Pensions for librarians have been widely discussed, and some progress has been made. Chicago and Buffalo have library pension systems, and the Nebraska Legislature in 1913 provided a retirement fund for librarians, which is the first legislative action taken in regard to the matter.

The New York Public Library, through recommendations of its medical officer, last year made rules looking to the protection and development of the health of its employees. These are mainly as follows:

> The daily recess period for meals shall be one hour. Every employee is required to take the full hour off duty. No employee shall be permitted to make up lost time or do library work during the recess hour. The librarians and assistant librarians will be required to work but 40 hours each week, exclusive of the recess period. The same schedule will be in force summer and winter.

INSTITUTIONAL LIBRARIES.

The use of books as remedial agencies in institutions for defectives and delinquents is a work that is gaining approval. The New York State Library Association is in close touch with the penal and reform institutions of the State, and is rendering effective service. The New York Library Club, in connection with the libraries of Greater New York and the School of Civics and Philanthropy, is doing effective work for that community.

The institutional libraries of the State of Oregon are under the advisory care of the State library. During the year a new library has been bought for the industrial school and the prison library was extended.

In New Jersey the library commission has supervision of all institutional libraries.

In Nebraska, the institutional libraries were given to the care of the Nebraska library commission by an act of the legislature in 1911. The report of 1912 shows a splendid organization, with results that are much appreciated by all concerned, especially by those in the penal institutions.

In Indiana, the library commission on its own initiative is gradually organizing and developing the libraries in a dozen or more State institutions.

In Minnesota, the board of control has but recently taken up the work for the State institutions, and has again secured the services of Miriam E. Carey, to further develop it for the entire State. Similar work has been conducted for several years in Iowa.

"A list of a thousand books for hospitals" has been issued by the American Library Association publishing board. The list was originally prepared by Edith K. Jones; additions and annotations have been made by Miriam E. Carey, supervisor of institutional libraries in Minnesota; Florence Waugh, librarian of institutional libraries for Nebraska; and Julia Robinson, supervisor of institutional library work for Iowa.

LIBRARY SCHOOLS.

Efficient library schools are maintained by the following institutions:

Simmons College, Boston, June R. Donnelly, director.
New York Public Library, New York City, Mary Wright Plummer, principal.
Pratt Institute, Brooklyn, N. Y., Edward F. Stevens, director; Josephine A. Rathbone, vice director, in charge of school.
Drexel Institute, Philadelphia, Pa., Corinne Bacon, director.
New York State Library, Albany, N. Y., James I. Wyer, jr., director.
Carnegie Library, Pittsburgh, Pa., Susan C. N. Bogle, director (for children's librarians).
Carnegie Library, Atlanta, Ga., Mrs. Percival Sneed, director.
Western Reserve University, Cleveland, Ohio, Alice S. Tyler, director.
University of Wisconsin, Madison, Wis., Mary E. Hazeltine, director.
University of Illinois, Urbana, Ill., P. L. Windsor, director.
Syracuse University, Syracuse, N. Y., E. E. Sperry, director.

In addition to these there are training classes in many of the large libraries, intended primarily to train their own employees. Such classes are maintained by the libraries of Detroit, Cincinnati, Chicago, St. Louis, Los Angeles, Kansas City, Brooklyn, and Philadelphia. Many of the State library commissions hold summer terms for library training, to which only those already in library service are admitted. The demand for well-trained assistants exceeds the supply.

The New York State Library, as a result of the demand for its own workers in that line, has instituted a course in law and legislative reference.

Wisconsin's experience has been similar, and the Wisconsin Library School now offers to graduates of accredited colleges and universities a full year's course in library administration and public service. The course is offered to meet the demands for sociological libraries, workers in law, municipal affairs, and libraries connected with indus-

trial commissions, boards of public utilities, commercial houses, manufacturing plants, etc. About one-third of the course will be given to bibliographic and technical training and two-thirds to library technique.

The course for school librarians offered for several years by the School of Education, University of Chicago, was discontinued in 1913.

Pratt Institute School of Library Science offers a normal course for graduates of standard library schools who may wish to prepare for teaching library economy and administration.

A recent report on bibliographic instruction in colleges, made by Mr. Willard Austen, of Cornell University, to the New York State Library Association, contains the following:

> Out of about 200 institutions to whom inquiries were sent, 165 replied. Most of these, as to be expected, reported that students were given individual help in using the library wherever opportunity offered; 84 reported that no courses of instruction are offered in any of these subjects; 38 reported introductory lectures given at the beginning of the college year, chiefly to introduce freshmen to the use of the library; 36 reported some courses running through the half year, sometimes the whole year; 23 reported instruction in the technical subjects, such as classification, cataloging, etc.; 37 offer courses dealing with general reference books. At 11 institutions instruction in palæography may be had, and the same number give courses in the history of printing, bookmaking, etc. At only one place could it be figured out that courses were offered in the literature of special subjects, and this was probably due to the fact that instruction at that place was largely of a special-subject character. At none of our collegiate institutions, except at those where library school courses were open to the general student body, can a student get instruction in all the subjects that go to make up a well-rounded course in bibliography for the general literary worker. Even the large universities, where nearly everything else is included in the curriculum, signally fail in offering instruction in most of these subjects.

AMERICAN LIBRARY ASSOCIATION.

The 1913 conference of the American Library Association was held at Kaaterskill, N. Y., June 23–28. There were 892 persons registered.

President Legler's address on the subject "The world of print and the world's work" reviewed the evolution of the book and traced its influence in the unfoldment of human rights.

Mr. Carnegie, in response to a request to name what he considered the most valuable accomplishment of the public-library movement in the past decade, replied: "The spread of the truth that the public library, free to all the people, gives nothing for nothing; that the reader must himself climb the ladder, and in climbing gain knowledge how to live this life well."

The Library Association of Great Britain, at the request of the American Library Association, sent an official delegate in the person of Mr. L. Stanley Jast, librarian of the Croydon Public Libraries and

honorary secretary of the British association. Mr. Jast addressed the American Library Association on "Present conditions and tendencies in library work in Great Britain."

Among other speakers from outside the ranks of the association were Mary Antin, the author of "The Promised Land," who spoke on "The immigrant in the library"; and the Hon. George McAneny, president of the borough of Manhattan, New York City, who gave an address on "The municipal reference library as an aid in city administration."

The general theme of the conference was "Specialization in library work," and among the topics grouped under this head and discussed in papers were the following: Work with foreigners and colored races; work among artisans and craftsmen; work among rural communities, especially dealing with woman on the farm; dependents and defectives in penal and charitable institutions; work with children and young people in the home, in the school, and in the library; municipal and legislative reference library work; library work for business men in the public libraries and in libraries of business organizations.

One of the most significant papers at section meetings was that on "Instruction in the use of a college library," by Miss Lucy M. Salmon, professor of history at Vassar; significant, not only in the address itself, but also in the selection of the topic by the college and reference section, as a hopeful indication that eyes are turning toward this vital subject and that the importance of teaching college students how to use the resources of their library is to receive the consideration it most assuredly merits.

Mr. E. H. Anderson, director of the New York Public Library, was elected president for the coming year, and Mr. Hiller C. Wellman, librarian of Springfield, Mass., and Miss Gratia A. Countryman, librarian of Minneapolis, first and second vice presidents, respectively.

The committee on library administration has continued its studies of methods used in certain libraries in accessioning and charging books. This study is being conducted with a view to eliminate any possible unnecessary steps and perform the entire process with greater efficiency and less expense.

The committee appointed in 1912 to investigate the cost and methods of cataloging is attempting to render a similar service in this department of library technique. A preliminary report was presented at the Kaaterskill conference.

The committee appointed about 18 months ago to investigate the relations that should exist between the municipal authorities and the public library made a further report at Kaaterskill, in which they reiterated their former conviction that the public library is an educational institution and that education is a matter of State rather

than local concern. This view received strong official support in a decision recently rendered by the Supreme Court of Michigan to the effect that, while municipalities are recognized under the local-government article, the public schools, libraries, etc., are under the educational article. The Supreme Court of Michigan, having under consideration the right of the city of Detroit to issue bonds for library purposes to an amount over and above the limit applying to bond issue for general municipal purposes, held that no such restriction applies in case of the library bond issues, as they properly fall in the same class as school bonds.

The committee's report emphasized, among other positions which the public library should hold, the following:

(1) The right by simple and easy methods for any public taxing or governing body to establish a free public library and to tax the community for its support; (2) administration of the library by an independent board of trustees rather than a single commissioner, and in particular not by a commissioner who has other matters on his hands. In case, however, such grouping of affairs is necessary, the library should be placed with other educational agencies, and in no case treated as a group of buildings, or as a mere agency of recreation; (3) the disposition of all funds of the library, including those from taxation, by the trustees of the library untrammeled by other authorities of the municipality; (4) operation of the library on the merit system, in the same way that the schools are operated—not by placing the selection of library employees in the hands of the same board that selects clerks and mechanics for the city departments, but by requiring that the library board establish and carry out an efficient system of service satisfactory to the proper authorities.

For the help of libraries in States which have no adequate library laws the committee framed a series of provisions that could, after adaptation to local conditions, be incorporated in a city charter to form part of the section dealing with the government of the public library. These are printed in the proceedings of the Kaaterskill meeting.

A committee headed by Mr. Frank P. Hill, librarian of the Brooklyn Public Library, has been for nearly three years engaged in a study of a better quality of news-print paper and possible remedies. The recommendations of this committee, presented at the January, 1913, meeting of the council of the American Library Association and printed in the January bulletin of the association, include the following:

(1) Volumes of newspapers printed since 1880 should be painted on the edges with "cellit," an American product prepared by the Chemical Product Co., of Boston, or a similar preparation.

(2) The volumes should be kept flat, with air space around them, and should not be exposed to sunlight.

(3) Current numbers should be bound as soon as the volume is completed.

(4) Librarians should endeavor to induce local newspaper publishers to print a special library edition on a 75 per cent rag paper.

Several newspapers have already undertaken the printing of a special library edition on a better quality of paper.

Cooperation with the National Education Association was emphasized and furthered by that organization's invitation to the American Library Association to appoint an official delegate to appear on their main program at the Chicago meeting in July, 1912. Dr. Arthur E. Bostwick, librarian of the St. Louis Public Library, was appointed and delivered an address on "The public school and the social center movement."

The policy has been continued of encouraging State library associations to place representatives of the American Library Association on the program of their annual meetings. President Legler was the official representative of the association at the Ohio meeting, the Illinois-Missouri joint meeting, and the South Dakota State meeting. Secretary Utley represented the association at the Illinois-Missouri meeting and at the Oklahoma State meeting. Dr. Arthur E. Bostwick, an ex-president of the association, was its representative at the State meetings in North Dakota, Minnesota, and Iowa. Mr. T. W. Koch, a member of the executive board, represented the association at the Indiana State meeting.

With the June number of the Booklist, the association's official magazine devoted to the subject of book selection, Miss Elva L. Bascom severed her five years' connection as editor, and Miss May Massee, of the Buffalo Public Library, was elected editor. A further change in the editorial work of the Booklist has been effected by the transfer of the editorial offices from Madison, Wis., to Chicago, near the headquarters office of the American Library Association. The advantages of this change of base are already apparent in the increased number of books which publishers send to the Booklist office for review and in the larger corps of expert collaborators found in a large city.

Activities at the headquarters office in Chicago have continued steadily to increase, correspondence being conducted with librarians, library commissions, and library trustees in all sections of the United States and Canada, and to a lesser extent in all parts of the world. The membership of the association has been increased during the last year by a net gain of 168, the present total membership being now 2,533.

AMERICAN LIBRARY INSTITUTE.

The American Library Institute held its regular meeting at the Hotel Kaaterskill, N. Y., June 25, 1913.

The cost of administration came before the institute for informal discussion. It was held by the committee that the conditions in different libraries are so unlike, and conditions in the same library are so different at different times, that it is not possible to say how much of the library income any of the different demands should

absorb. It was held by some that there is a basis somewhere on which might be obtained uniformity of statistics.

Mr. William Dawson Johnston, of New York City, gave an address on "The Need of Specialization in Library Service."

Mr. Johnston's thesis held that there should be a distinction between bibliographers and clerks in library service, and that there should also be differentiation of function among bibliographers. He advocated, also, securing the service of experts from allied institutions or from independent scholars resident in the community.

Dr. John Thomson, of Philadelphia, presented an address on "The Pleasures of being a Librarian." He illustrated his topic by pointing out curious, humorous, and impossible entries in various standard indexes.

THE PUBLIC LIBRARY IN THE COMMISSION FORM OF GOVERNMENT.

An investigation of this subject by Charles S. Greene shows the whole matter of the relation to the municipality to be an extremely important subject in view of the number of towns and cities that are adopting new charters of this sort.

The earliest commission charters were adopted in southern cities and in smaller towns, where the library had not assumed the relative importance assigned to it in other places, so that the first commission charters gave scant consideration to the question. Those charters have been followed, often rather blindly, by many larger cities. In some charters the library is under the complete control of one commissioner. In other cities library boards have been discontinued and the librarian reports directly to the commission or to some one commissioner. In some the effective control of the staff is put in the hands of a civil-service commission. In most the method of library support is left uncertain and generally inadequate.

PUBLICATIONS.

Aids in library work with foreigners. M. Reid and J. G. Moulton. 24 p. A. L. A. Publishing Board. 10 cents.

American library annual, 1912–13. 468 p. R. R. Bowker Co. $5.

A. L. A. catalogue, 1904–11. Class list 3,000 titles for popular library. Ed. by Elva L. Bascom. Chicago A. L. A. 1912. $1.50.

A thousand books for the hospital library. E. K. Jones. 56 p. A. L. A. Publishing Board. 25 cents.

Books for school libraries. New York State education department, Bulletin No. 513. A suggestive list of 700 titles.

Buffalo's system of public school and public library cooperation. Mrs. E. H. L. Elmendorff.

The children's free library and city education. Frances J. Olcott. Reprinted from "The American City," March, 1913.

Buying list of books for small libraries. 64 p. A. L. A. Publishing Board. 10 cents.

Children's reading. F. J. Olcott. Houghton, Mifflin Co. 344 p. $1.25.

Commissions, State aid and State agencies. Asa Wynkoop. 24 p. A. L. A. 10 cents
Course of study for normal school pupils on literature for children. Julia S. Harron, Corrine Bacon, and J. C. Dana. 134 p. (Modern American library economy as illustrated by the Newark (N. J.) free public library, pt. 5, sec. 5.) H. W. Wilson Co. $1.
Decimal classification. Melvil Dewey. Eighth ed., enlarged. Forest Press, Lake Placid Club, N. Y.
Essentials in library administration. L. E. Stearns. Second edition. 103 p. A. L. A. Publishing Board. 25 cents.
Finding list of books relating to printing, book industries, libraries, and bibliography in the Virginia State library. Richmond, 1912.
How to choose editions. W. E. Foster. 24 p. A. L. A. Publishing Board. 15 cents.
How to plan a library building for library work. C. C. Soule. 403 p. Boston Book Co. $2.50.
Index to library reports. Katherine T. Moody. 185 p. A. L. A. Publishing Board. $1.
League of library commissions. Yearbook, 1912. 40 p. A. L. A. Publishing Board. 25 cents.
Library Building. W. R. Eastman. 17 p. A. L. A. Publishing Board. 10 cents.
Library conditions in American cities. "Educational Bi-monthly." December, 1912.
Library work, cumulated, 1905–1911. A bibliography and digest of library literature. 409 p. H. W. Wilson Co. $4.
Normal library budget and its units of expense. O. R. H. Thomson. 18 p. A. L. A. Publishing Board. 15 cents.
Periodicals for the small library. F. K. Walter. 32 p. A. L. A. Publishing Board. 10 cents.
Proprietary and subscription libraries. C. K. Bolton. 10 p. A. L. A. Publishing Board. 10 cents.
Public library movement. S. S. Green. 336 p. Boston Book Co. $2.25.
Special collections in libraries in the United States. W. D. Johnston and I. G. Mudge. (U. S. Bu. of Edu. Bul. 23; whole no. 495.) 140 p. Supt. of Doc. 10 cents.
Training for librarianship. Mary W. Plummer. 17 p. A. L. A. Publishing Board. 10 cents.
Course in reference work, and some bibliographies, of special interest to teachers. Delia G. Ovitz. 38 p. Wisconsin State normal school.
Exercises on use of reference books. Delia G. Ovitz. 12 lessons. Wisconsin State normal school, Milwaukee.
First selection of 500 children's books for a library. Michigan State library. 92 p.

SPECIAL COLLECTIONS OPENED TO THE PUBLIC IN 1912–13.

The Chemist Club of New York City opened what is claimed to be the largest chemical library in the country.

The University of Chicago secured the Durritt collection of Louisville, Ky., an especially valuable collection on southern and early western history.

The Yale mission library, of Yale University, has opened a library to contain books on foreign missions.

The Forestry bureau of Oregon opened a forestry library in Portland.

The University of Minnesota has become a regular depository for municipal documents for all cities having a population of 30,000 or more.

SCHOOL LIBRARIES.

The number of public high-school libraries in the United States is 10,329, containing 6,185,937 volumes. Number of private high schools, 1,405, containing 2,443,880 volumes.

WIDENER MEMORIAL LIBRARY.

Perhaps the greatest interest in university libraries for the year centers around the proposed new library for Harvard, the Widener Memorial Library. The cornerstone was laid June, 1913, and the plans for the future library are full of promise. The splendid collections of Harvard will have ample room, and the special collections will be made available in a way not possible heretofore. There will be provided throughout the greater part of the stacks small stalls for individual readers where one may keep his books and papers and work continuously from day to day in close proximity to the general collections on the subject in which he is interested. The card catalogue is being transferred from the old standard size to the present standard size of card, and something like 162,000 printed cards have been placed in the catalogue. The shelf capacity is estimated at 2,500,000 volumes, about five times the capacity of the old library. The libraries of Harvard University now contain about one million books, and a half million pamphlets.

NECROLOGY.

Death claimed during the year several who had made distinct contributions to the development of library service. Foremost among these were:

Dr. John Shaw Billings, librarian of the New York Public Library, who died March 11, 1913.

Charles Carroll Soule, library trustee of Brookline, Mass., and an authority on library architecture, January 7, 1913.

Walter Kendall Jewett, librarian of the University of Nebraska, March 3, 1913.

Charles A. Larson, editor of the publications of the Chicago Public Library, August 19, 1913.

Clarence W. Ayer, librarian of the public library of Cambridge, Mass., April 12, 1913.

Bertha S. Wildman, of the Carnegie Library of Pittsburgh, February 19, 1913.

EXPANSION IN LARGE CITIES.[1]

Atlanta.—This library turns into the city treasury the fines and fees of the library, which last year amounted to $1,577.20. Small deposits of books have been placed in associations and commercial insti-

[1] From reports of the libraries, unless otherwise noted.

tutions, and 1,000 books have been loaned to the schools; a number of free lectures and attractive exhibits were held at the building during the year.

Baltimore.—The Enoch Pratt Free Library, of Baltimore, records a circulation for the year of 706,222. There are 17 branches in the city, with 300,000 volumes on the shelves. The administration of the library cost the past year $88,932.13. A new departure has been an attempt to have good literature read aloud to the public in the branch libraries.

Boston.—Boston Public Library has occupied one new branch building, costing, with its site, $86,000—a model branch building. Two other branch buildings are approaching completion. One in Charlestown will cost $72,200, and the other, in East Boston, $100,000, including in each case the cost of the site and equipment. Branch reading rooms in municipal buildings in different parts of the city are being provided. Two noteworthy groups of statuary flanking the principal entrance to the main library building, one representing art and the other science, the work of Bela L. Pratt, sculptor, have been put into position during the year.

The number of volumes sent on deposit from the central library through the branch system was 42,587, of which 11,432 were sent to schools. There were also sent from the branches themselves and from two of the largest reading rooms 25,654 volumes on deposit, distributed among 153 places. Of these, 20,056 were sent to schools. Not only is the collection of the central library used as a reservoir from which books may be drawn for use in the branches and reading rooms, but each of the branches and reading rooms is in itself a reservoir from which books are drawn for use by teachers in schools in its immediate vicinity. Books were supplied the public through 28 branches and reading rooms, deposits in 31 public and parochial schools, 61 engine houses, and 31 other institutions.

Brooklyn.—The Brooklyn public library consists of 28 branches, 3 stations, 9 deposit stations, 11 factory stations, 3 stations in department stores, and 275 institutions to which traveling libraries are issued; 17 of the branches are housed in buildings erected from money given by Mr. Carnegie. So rapid has been the development of the communities where most of these branches have been erected that several are taxed to their utmost capacity.

Ground was broken for the new central library building of Brooklyn, and several new deposit stations were opened.

The library work with children is one of the most important activities undertaken. The "Books for boys and girls" and "The child's own library" are in the second edition, and requests for copies come from all parts of the country and often from abroad. A system of traveling libraries was organized for active service to all Brooklyn

police stations, fire departments, railroad terminals, and a large number of commercial and manufacturing institutions. Schools, both public and private, are in close connection with the children's department.

Buffalo, N. Y.—A plan of cooperation between the Public Library, Academy of Science, Art Museum, Historical Society, the public schools, and the Grosvenor Library, entered upon the last year, has resulted in a better understanding of and a greater improvement in the field of work common to these institutions.

A bequest in the will of a former citizen was "given to the Buffalo public library in acknowledgement of many happy hours spent there."

The libraries for the keepers of lighthouses in the Buffalo district have been supervised by request made by the lighthouse inspector.

A pamphlet was issued describing the Buffalo system of public school and public library cooperation, by Mrs. H. L. Elmendorff, and it was found extremely useful.

Printed lists were sent to the pupils of the graduating class of the grammar schools, urging their continued use of the library, and to 10,000 students of the night schools, calling attention to the opportunities offered by the public library. Direct results were observed in demands for books upon the trades.

The library took part in the child's welfare exhibit, and by means of display cards and photographs, on exhibition of books for children, classroom libraries used in the public schools, the work of the library with the children of Buffalo made a most interesting showing.

Chicago. Chicago Public Library.—During the year, the twenty-sixth circulating branch was opened at Holstein Park. A civics room, covering every phase of social and political activity, was opened in the main library. The municipal reference library in the city hall passed under the control of the public library. The library service was maintained through 487 agencies, including 26 branches, 87 delivery stations, 23 deposit stations in business houses, and 342 schools.

Chicago. The John Crerar Library.—The principal event of the year was the acquisition of property, 135 feet on Michigan Avenue and 128 feet on Randolph Street, as a site for a new building. This will provide a central location which the directors are convinced will develop the greatest usefulness of the institution. As 1916 is the earliest date at which the building can be ready for occupancy, the library has made arrangements to continue in their present quarters until then.

Chicago. Newberry Library.—The board has lost one of its charter members, Gen. E. C. Newberry, who died July 20, 1912. The library was the recipient of a number of valuable gifts during the year. A number of exhibitions of material have been held during the year.

Two special publications, the Asiatic and Turkish manuscripts described by Duncan B. McDonald, D. D., and a list of books and manuscripts on "Captivity among the Indians in North America," in the E. E. Ayer collection.

Cincinnati.—A teachers' room was opened in the public library, having on its shelves a collection of the best children's books, arranged by grades, material on children's literature, courses of study in public school systems of various cities, books on story telling, and subjects of interest to teachers.

Courses of lectures have been given on children's literature and library work with children, in the college for teachers and in the kindergarten training school.

Two new branches in Carnegie buildings were opened. The issue of books through the branch department showed an increase of 104,000 over the preceding year, with increased growth in registration figures. In the municipal benefit exhibit the work was brought to the attention of the public by a large wall map and a collection of 60 pictures.

A city civics room was opened, where special attention will be given to students of social questions of the day. The collection in this room consists of books, current periodicals, clippings, classified and arranged on shelves in boxes. The number of letters translated for patrons was doubled.

Cleveland, Ohio.—The Cleveland public library's collection numbers over half a million volumes, which were used by a million and a half visitors who came to the library to read or do reference work. The circulation for reference work was over two and a half million volumes. A bond issue of $2,000,000 for a new library building, which will form part of the civic center, was voted in May, 1913. For the purpose of furthering the usefulness of the branches, a representative committee of citizens was organized.

In 1913, for the first time, a special plan of work was inaugurated with public night schools and with all other regularly organized evening classes and it met with great success. A training class for children's librarians was established January, 1913.

Denver.—The report of the Denver public library records 135,263 volumes in the library, with a circulation of 184,397 volumes through the main library, 4 branches, and 20 distributing stations. Number of cards in force, 28,905; total appropriation for the year, $83,562. An open shelf for the use of teachers was started during the year. Four new branch buildings were opened in the spring of 1913.

Detroit, Mich.—The abolishment of the requirement of a guarantor and the extension of privileges to persons living outside the city resulted in an addition of 20,973 card holders, giving a total of 73,026. An open-shelf room, with 6,000 volumes, was inaugurated. Eight

new stations were opened, mostly in commercial institutions, with a total circulation from them of 80,674 volumes. Six Carnegie branches were arranged for, and five of them were completed, making ten branch libraries for the cities.

A competition for plans for a new main building led to the employment of Mr. Cass Gilbert. Plans and contracts for the $1,000,000 building are under way. The building will be of sufficient dimensions and general arrangement to serve for 50 years at least.

Mr. Henry M. Utley, who had been librarian since 1895, retired from active service November 1, 1912, and was made librarian emeritus. Mr. Adam Strohm, who had been first assistant librarian and acting librarian, was made librarian.

Houston, Tex.—The Carnegie library contains 35,406 volumes and has 13,464 borrowers. A children's department was opened under a trained librarian. Lists of important new books, lists of subjects of timely interest—on municipal affairs, technical books, house building and furnishing, the best fiction—have been distributed. A special service for the various school buildings was started by Miss Calhoun, children's librarian. A lecture course was held during the year. A colored branch was opened in April, 1913, from which, in the first month, 3,000 books were loaned.

Indianapolis.—The general assembly of 1913 passed a law permitting the issue of bonds for $500,000 by the school board which controls the library to erect a library building on the site given by James Whitcomb Riley, valued at $100,000. The building will be begun within the year. The fifth of the six branch buildings given by Mr. Andrew Carnegie was opened during the year. An important change in administration is the shortening of the number of hours per week from an average of 47 to 40½. This was done by reorganizing the working time, with night work and time off to compensate. The result is much better service and better feeling among the staff.

Kansas City.—The public library is in process of reorganization, being thoroughly reclassified and recatalogued. A new branch building was opened March, 1913. Bonds were voted for an addition to the central library building and 13 additional branches. Deposit stations were established throughout the city and a commercial department opened.

Los Angeles.—The number of volumes in the public library is 224,349. The new city charter which would have abolished the board of directors and taken away the assured income of 4-mill assessment was defeated.

A number of exhibits of books have been held in the library through the courtesy of the dealers, and talks on children's books have been given before parents' and teachers' associations throughout the city.

A series of story hours have been given by the students of the University of California. Good results on both sides have come from the cooperation. A training class of 10 women was prepared for the service of the public library.

A new branch library building, the gift of Mr. Carnegie, was opened. About half the circulation was from the branches and deposit stations.

Minneapolis.—Minneapolis public library opened a new building for the Seven Corners branch library; cost, $32,000; added 14 libraries during 1912, 3 branches, 5 factory libraries, 6 settlement libraries; received $125,000 from Carnegie Corporation for erection of 4 branches.

Nashville, Tenn.—The Carnegie library reports a gift from Mr. Carnegie of $50,000 for two branches, one for white people and one for colored people.

New York public library.—There are 1,002 persons on the staff of the New York public library. The number of readers registered was 7,969,664. An average of 1,112 persons made use of the reference room daily during the year. The reference department was conducted during the year at an expense of $433,579, and the circulation department at an expense of $661,322. There are 40 persons in the circulation department.

Edwin H. Anderson was appointed director to succeed Dr. John Shaw Billings, deceased.

Newark, N. J.—In Newark the public library has a business branch in a building erected for the purpose and leased for five years. The library occupies the whole building—two floors, each 37 by 90 feet; the first floor on the level with the street, the upper floor with skylights.

The library has now no reference department, as the same is ordinarily understood. The lending department includes reference work. This plan proves very satisfactory. All fiction has been moved to a special room on the first floor; all registration work for the whole system has also been removed to a special room on the same floor. This relieves the lending room proper of many visitors and much consequent confusion and makes the general library an admirable place for students.

Most of the upper classes of the grammar grades about to pass into the high school are given one lesson, in the library, on the library and the use of books. The lessons given by the high-school librarian to all high-school classes, as they go through their course, will be modified and extended.

The library publishes a monthly journal called the "Newarker." Its purpose is to advertise the library in Newark and to make the library more useful in its community. The museums of art and science owned by the Newark museum association are still housed

in the library building. This association and its collections are both outgrowths of the activities of the library in the fields of art and science and the work of broadening the interests of Newark citizens.

One hundred lists of books and seventy stories about collections in the department were printed in the local papers, while 300 meetings were held in the library building.

Philadelphia.—The number of volumes in the free library is 415,802, with a total circulation of 2,060,499. There are 4,322 embossed volumes for the blind, divided among the five types. Cooperation along these lines is carried on by the Pennsylvania Home Teaching Society and the Pennsylvania Institution for the Blind. A municipal reference library was established. A lecture course including 44 lectures, with a total attendance of 11,477 and an average attendance of 260, was given.

Pittsburgh.—The Carnegie Library of Pittsburgh had its appropriation increased from $250,000 to $260,000. Seventeen students entered the library school, four of whom were graduates of other library schools and eight were college graduates. The total number of regular students in both classes was 39. The students were from 14 States.

Portland, Oreg.—The efficiency of the public library has been increased by the extension of the hours of opening on Sunday and holiday evenings, the organization of the high-school libraries under trained assistants, traveling libraries to Sunday schools and clubs, and the enlargement of subbranches.

Over 11,000 persons attended lectures in the auditorium; 1,500 people used the committee rooms. Two lantern slides were provided for the 11 moving-picture theaters. One slide stated that the stories of the pictures might be obtained at the central library and the other slide gave the location of the central library and branches. The slides were shown at performances which included literary films.

The opening of the new central library building of Portland took place September 8, 1913. This is a most important fact in the history of the library, in that it is a library building for Multnomah County.

The North Portland branch, costing $35,000, the gift of Mr. Carnegie, opened in February; the Gresham branch, costing $12,000, also the gift of Mr. Carnegie, was opened March 1; four subbranches, at a cost of $60,000, also the gift of Mr. Carnegie, are to form part of the system. One at Vernon is opened and work on another has begun. Gifts amounting to $30,320 were received from citizens of Portland and Multnomah County for branch libraries. The municipal reference library was opened in the city hall on April 1.

Providence, R. I.—The work of the public library is handicapped by inadequate equipment, both of quarters and appropriation. The

work with foreign readers has received a notable impetus with the important series of lectures at the public library under the direction of the immigration education bureau. They were planned for the various sections of foreign readers, and covered such subjects as "Our political institutions and the demands of the citizen," "The relations of the emigrant to the United States and to his people," with lectures also on prevention of contagious diseases and other sanitary measures, child welfare, history of American institutions, National, State, and municipal. Many of these were illustrated by stereopticon views.

St. Joseph, Mo.—At the public library special efforts were made during the year to emphasize the practical value of the library for professional, business, and employed men of the entire city. Addresses before commercial clubs, posters for factories and stations, blotters for business men, circulars for advertising men, newspaper stories and lists, printed book lists, personal letters, and post card announcements of the new books, electrical booth display in pure food exhibit, home circulars addressed to school children, library slides in moving picture theaters, school visits, etc., illustrate some of the year's advertising efforts.

A circular addressed to each school child more than doubled the juvenile registration in one month, and it is believed increased the adult registration. An Edison home kinetoscope, for use in the story hour, has been a good investment. A new department, called the creative department, is given the supervision of compiling reading lists, newspaper stories, printed library publicity, bulletins, picture collections, and special exhibits.

An interesting addition during the year was the special Eugene Field collection of special and rare editions, containing some 125 rare items of books, pamphlets, and magazine articles. The Buchanan County medical society presented to the library subscriptions for 20 leading current medical journals.

St. Louis, Mo.—One night in each month, the public library has made a special effort to show the building and the operation of its departments to interested citizens. The average attendance has been about 100. Use of the assembly rooms by organizations of all sorts reached 192 organizations, holding 2,454 meetings, in the central library and the six branches.

Traveling libraries have gone to school stations, classrooms, settlements, evening schools, homes, playgrounds, commercial and industrial institutions, engine houses, etc. An hourly delivery was begun in the down town stations in November, and is a part of the regular work.

In November, 1912, a station was opened in a department store down town, and an hourly delivery of books was begun. Shoppers

may order books by telephone. This frequency of delivery between library and station is a new departure.

The report of the efficiency engineer employed by the city council to investigate the city departments stated that the—

management of the Seattle public library as a whole is admirable, and a return to civil service methods would not bring any better results. The library department at 30 per cent less rates of pay, has built up an organization, distinctly more efficient than that of any department under civil service rules.

Springfield, Mass.—The first full year of the new library building justified the highest hopes of its usefulness. Its arrangement has been found practical; pleasure and comfort are afforded by the commodious quarters, and it is praised for its beauty. The grounds around the building have been improved and the setting is both appropriate and sightly.

More than one-quarter of the population of Springfield is foreign-born. Few classes of books in the library are so largely circulated as the foreign books. More than 25,000 books were deposited in the various classrooms for the use of the pupils. Systematic instruction in use of the library has been given the ninth grade pupils at the main building. A special attempt was made last year to increase the use of the best books in the library with gratifying results. An investigation of the processes and results showed that under normal conditions a display of the classics circulated on the average seven times as frequently as other books of non-fiction. Other special groups of books in the library have been exhibited, and lists of the best books of various kinds have been distributed, with gratifying success. The number of distributing stations is 334, including 298 school classrooms and a number of manufacturing and commercial concerns. Exhibits of pictures, birds, minerals, plants, and drawings have been placed in the branches far off from the main library and museum at various times during the year.

Washington, D. C.—The free public library of Washington City utilizes 161 agencies for the distribution of books, the central library, 1 branch, 5 social settlement stations conducted by volunteers, 2 stations conducted by persons paid by cooperating institutions, the District building, 7 public high-school libraries, 3 stations in public school buildings, 82 grammar schools, 1 parochial school, 5 private schools, the library of Howard University, 6 playground libraries, 35 home libraries, 4 parents' associations, 11 fire stations, 1 Camp Fire Girls' group, 3 summer camps, 2 Sunday schools, and 1 mission. There are in addition 24 charitable and correctional institutions for children and adults to which withdrawn books are sent. Work with the schools made a high record and an exhibition of the work with the schools held in the fall was an effective help. It attracted much attention beyond the local borders.

CHAPTER XV.

ROMAN CATHOLIC PAROCHIAL SCHOOLS.

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CONTENTS.—Historical sketch—Present organization—Extent of schools—The curriculum and grading—Parochial high schools—Standardization of high schools—Improvement of teachers—Diocesan school boards and supervising officers (Table 1)—Statistics for 1912 and 1913 (Table 2).

The parochial school constitutes the foundation of the Catholic educational system in the United States. It was the first of the schools established by the church in this country, and now ranks of unquestionable importance, for on it depends the organized religious education of the people and, in large measure, the success of the higher institutions of learning. Its maintenance at present represents an annual expenditure conservatively estimated at $11,000,000, which is raised by voluntary contributions.

HISTORICAL SKETCH.

The parochial school is one of the early forms of Christian schools which flourished extensively during the middle ages. In this country it is an outgrowth of the mission schools, the earliest of which were those of the Spanish Franciscans in Florida and New Mexico, which were in existence in 1629, "four years before the establishment of the oldest school in the 13 eastern colonies."[1] These latter were, consequently, in the order of foundation, the first elementary schools in the present territory of the United States. In the colonial period the growth of the parochial schools was commensurate with that of the church itself. Dr. Burns, the historian of the Catholic school system, says of this period:

> As a matter of fact, the foundation of the Catholic parish-school system in the United States dates from the early years of the Maryland colony. It represents, therefore, a development covering a period of over 250 years. Broadly speaking, we can distinguish two great periods in its development—the first, extending down to the time of the Revolution, and the second, from that epoch-making event to our own day. The salient feature of its growth throughout the whole time is its dependence upon the growth of the church in general. A direct relation existed between the development

[1] Burns, The Catholic School System in the United States; 59. (New York, 1908.) Rep. of U. S. Commis. of Ed., 1903, I, 555.

of the church and the development of Catholic schools. We can see the proof of the existence of this relation during the first period in the fact that wherever Catholic settlements were formed and Catholic life reached any degree of maturity Catholic schools were set up and a corresponding educational development took place. In settlements where Catholic life was weak or short-lived, either no schools were established, or those that were had only a short or desultory existence. In the post-Revolutionary period the relation is even more clearly illustrated.[1]

In the early days of the Republic they were opened as free schools in large cities like Baltimore and New York wherever the parish funds allowed.

The bishops discussed the parochial school in the First Synod of Baltimore, in 1791, and in the First Provincial Council of Baltimore, in 1829, they decreed as follows:

Since it is evident that very many of the young, the children of Catholic parents, especially the poor, have been exposed and are still exposed, in many places of this province, to great danger of the loss of faith or the corruption of morals, on account of the lack of such teachers as could safely be intrusted with so great an office, we judge it absolutely necessary that schools should be established in which the young may be taught the principles of faith and morality while being instructed in letters.[2]

For a struggling Catholic population it was a tremendous problem to provide schools as well as churches, and one of the chief difficulties was to obtain Catholic teachers. The introduction of the teaching orders, those of men and of women, met this demand, and during the immigration period when thousands of Catholics came to America from Europe, Ireland and Germany especially, the Sisters and Brothers were engaged for the work of the elementary schools. At the time of the Second Plenary Council of Baltimore, in 1853, despite the difficulty of obtaining all the teachers necessary, the bishops were exhorted by the council as follows:

We exhort the bishops, and in view of the grave evils which usually result from the defective education of youth, we beseech them through the bowels of the mercy of God to see that schools be established in connection with all of the churches of their dioceses; and, if it be necessary and circumstances permit, to provide, from the revenues of the church to which the school is attached, for the support of competent teachers.[3]

In the Second Provincial Council of Cincinnati, held in 1858 (the province of Cincinnati extended at that time from the Alleghanies to the Mississippi), it was decreed:

It is the judgment of the Fathers that all pastors of souls are bound, under pain of mortal sin, to provide a Catholic school in every parish or congregation subject to them, where this can be done; and in order that each Ordinary may know what are the parishes in which this obligation exists, they decree that the Tridentine Law, s. xxii, c. ix, is to be practically enforced, by which the rectors of churches are required each year to render an exact account to their Ordinaries of all the revenues accruing to their

[1] Burns, The Catholic School System in the United States, 14 (New York, 1908).
[2] Decretum 33. Cf. Conciliorum Provincialium et Plenarii Baltimorensium, Decreta. Baltimore, 1853.
[3] Decreta Conc. Prov. et Plen. Balt., n. 13, p. 47. Burns, ibid. 184.

churches in any way, which they therefore strictly enjoin as to be observed by the aforesaid rectors.[1]

In 1875 the Congregation of the Propaganda, then in charge of American affairs, issued an "Instruction to the Bishops of the United States concerning the Public Schools," in which the Catholics, both for their own sake and the vital interests of the American Republic, were directed to establish their own schools. The Instruction read:

All are agreed that there is nothing so needful to this end as the establishment of Catholic schools in every place—and schools in no way inferior to the public ones. Every effort, then, must be directed toward starting Catholic schools where they are not, and, where they are, toward enlarging them and providing them with better accommodations and equipment until they have nothing to suffer, as regards teachers or furniture, by comparison with the public schools.[2]

The next important ecclesiastical law for this country was promulgated by the Third Plenary Council of Baltimore, 1884, which has been the directing force during the period of the greatest development of the parochial schools. Therein Catholic parents were not only exhorted to send their children to Catholic schools, but commanded to do so.

Therefore we not only exhort Catholic parents with paternal love, but we also command them with all of the authority in our power, to procure for their beloved offspring, given to them by God, reborn in Christ in baptism, and destined for heaven, a truly Christian and Catholic education, and to defend and safeguard them from the dangers of an education merely secular during the entire period of childhood and youth; and therefore to send them to parochial schools or others truly Catholic, unless perchance the Ordinary, in a particular case, should judge that it might be permitted otherwise.

Due consideration was made for those parents who for a sufficient cause did not send their children to the parish schools. A decree of far-reaching importance was the following:

Near each church, where it does not yet exist, a parochial school is to be erected within two years from the promulgation of this council, and is to be maintained *in perpetuum*, unless the bishop, on account of grave difficulties, judge that a postponement be allowed * * *.

All Catholic parents are bound to send their children to the parochial schools, unless either at home or in other Catholic schools they may sufficiently provide for the Christian education of their children, or unless it be lawful to send them to other schools on account of a sufficient cause, approved by the bishop, and with opportune cautions and remedies. As to what is a Catholic school, it is left to the judgment of the Ordinary to define.[3]

This council, furthermore, by its decrees touching upon the supervision of the schools by the pastor, the training of teachers in the normal schools of their novitiates, the certification of teachers, both religious and secular, laid the foundation for that development

[1] Conciliorum Provincialium Cincinnatensium, Acta et Decreta. Decretum vi. (New York, 1886.)
[2] Con. Plen. Balt. III. Acta et Decreta, 279. Appendix. (Baltimore, 1886).
[3] Concilii Plenarii Baltimorensis Tertii, Acta et Decreta, 196, 199.

in organization and administration which in the past 25 years has been remarkable.

PRESENT ORGANIZATION.

The parochial schools, like the parish churches, are organized in diocesan systems. They come immediately under the jurisdiction of the bishop of the diocese. In ecclesiastical law the elementary school always enjoys this peculiar relation to episcopal authority, even when it is conducted by a community of teachers who might not in other things be subject to the bishop.

The administration of schools in the dioceses of this country is usually confided to a school board consisting of priests of the diocese appointed by the bishop, and of which the bishop and his vicar general are often ex-officio members.[1] Considering the conditions prevailing in certain dioceses where it has been impossible to establish many schools these boards are very numerous. In the 99 dioceses of the United States (including Alaska), 58 had school boards in 1912–13. There is no uniformity in the constitution nor in the functions of this board. In some of the dioceses the boards are subdivided into sectional boards for the limited jurisdiction of counties, deaneries, etc. All actually constitute one board for the diocese. In recent years some of the school boards have been abolished, and others limited in their powers because of the appointments of diocesan superintendents of schools. The ordinary functions of the board in dioceses not having a superintendent of schools are: Issuing school regulations, inspection, and conducting examinations. The special functions are: The formation and maintenance of the course of studies, the adoption and change of textbooks, and the certification of teachers. There are in the United States 41 dioceses having the school board alone and no other officers of supervision.

In dioceses having a superintendent of schools and a board for examination of teachers, the functions of the school board are naturally more restricted. Representing episcopal authority in educational affairs, the board receives the annual report of the superintendent, acts on his recommendations and the larger questions of administration. Their actions are mostly of a legislative nature. In many dioceses, however, the board forms, as it were, the council of the bishop on educational matters, and school regulations are issued directly by the bishop or the superintendent of schools.

The chief officers of supervision are the diocesan superintendents or supervisors of schools, the school visitors or examiners, and the community inspectors. The superintendents are and have been the most potent forces in organizing diocesan systems. The first to hold

[1] The school board of the archdiocese of New Orleans, called the Catholic Board of Education, offers an exception to the above statement. It consists of 11 priests and 5 laymen. The archbishop is president and his vicar general vice president.

the office was appointed in the archdiocese of New York in 1888. Similar appointments followed in Omaha and Philadelphia in 1891 and 1894, respectively, and at present (1913) 23 dioceses employ priests in that capacity. Table 1 presents a list of supervisory officers of this rank for 1912–13. Two changes are noted for the year, viz, the appointment of a superintendent in the diocese of Cleveland, where the office was created and the Rev. William A. Kane placed in charge, and the appointment of the Rev. Joseph A. Dunney to succeed the Rev. William R. Charles as inspector of schools of the diocese of Albany.

The diocesan superintendents of the United States are organized under the auspices of the Catholic Educational Association and constitute the main element in the superintendents' section of the parish school department. They meet annually at the time of the convention of the Catholic Educational Association to discuss problems peculiar to their work. Only duly appointed diocesan superintendents, community inspectors, and representatives of bishops and school boards are allowed to participate in the proceedings of the section. At the last convention of the association held in New Orleans, June 30–July 3, the topics discussed were: "The Superintendents' Visit to the School," by the Rev. John A. Dillon, superintendent of parish schools, diocese of Newark, N. J.; "Industrial and Vocational Training," by the Rev. Michael J. Larkin, superintendent of parish schools, archdiocese of New York. In meetings held jointly with pastors of schools two topics discussed were: "The Need of Men Teachers in Educational Work," by the Rev. Bede Horsa, O. S. B., of St. Joseph's Seminary and College, St. Benedict, La.; and "The Priest's Adaptability for School Work," by the Rev. John Ryan, pastor of St. Paul's Church, Cambridge, Mass.[1]

Special meetings of the diocesan superintendents may be called at other times during the school year. In March, 1913, the superintendents of eastern dioceses met in New York City, and one of the important topics discussed was the curriculum.

The ordinary functions of the superintendent are the collection of statistics, inspection of schools, conducting of examinations, control of course of study and textbooks, and whatever else of a special nature may be necessary or suggested by diocesan authorities for the standardization of the schools. He renders an annual report to the bishop or school board, and this in many instances is printed for general distribution. In 1913 the diocesan superintendents of New York, Philadelphia, Pittsburgh, Newark, and St. Louis issued such reports. They circulate principally in the respective dioceses, and in a few instances appear in the form of yearbooks, which contain, in addition

[1] Rep. of Proc. and Addresses of Tenth Annual Meeting of Cath. Ed. Assoc. (Columbus, Ohio).

to a tabulated report, much information and direction of value to principals and teachers.

A supervisory officer whose name does not appear in the Official Catholic Directory, nor in ordinary sources of information on schools, but whose work is of far-reaching importance is the *Community Inspector*, so called because he is a member of a religious community, or congregation, who inspects the schools of his community. At times when the community conducts schools in many dioceses the inspector's jurisdiction is extended to an ecclesiastical province, like, for example, the province of New York, which embraces the archdiocese of New York and the dioceses of Albany, Brooklyn, Buffalo, Newark, Ogdensburg, Rochester, Syracuse, and Trenton, or the States of New York and New Jersey, but usually the inspector's duties are confined to the schools of his community or congregation in a single diocese. These he visits and examines regularly, under the direction of the diocesan superintendent. He uses the suggestions of the superintendent, acts upon the results of the latter's tests or inspection and endeavors to keep the schools of his charge up to the required standard.

The community inspector, as in the case of teaching Sisters, is able with a limited number of schools under her care to give more time and attention to them than would be possible for the general or diocesan superintendent of a large system. She is expected to spend the school year visiting her schools, and as she resides with the teachers during her visits, has a rare opportunity of addressing them collectively and directing them individually.

The inspectors of a diocese are organized under a board of inspectors and their activities are unified and controlled by the diocesan superintendent who is ex officio chairman or president. He calls regular meetings of the board and is throughout the year in constant communication with individual inspectors on the affairs of the community's schools. He quite properly regards the inspectors as his most efficient auxiliaries. During recent years, since the movement for the appointment of diocesan superintendents has taken hold, the number of community inspectors has also increased. Lists of these officials are published in reports of superintendents of schools, e. g., Report of Superintendent of Archdiocese of Philadelphia, of the Diocese of Newark, etc. In 1912–13, the diocese of Hartford, Conn., followed the example of other dioceses like St. Louis, Cincinnati, Newark, and Pittsburgh, by appointing three community inspectors for the Sisters of Mercy, the largest teaching community in the diocese. Each inspector has a section of the diocese under her charge.

The supervisory official who is placed in immediate charge of the individual parochial school is the pastor of the parish. He may and often does delegate his office to an assistant priest, or to a member

of the teaching community in charge of the school. The pastor is held responsible by the bishop for the standing of the school, and he is obliged by ecclesiastical law to visit it regularly, supervise the teaching, especially of religion and sacred history, and personally or by delegate to perform the functions which we associate with the work of school principal.

EXTENT OF SCHOOLS.

Parochial schools are found in all of the dioceses of the United States, varying in number according to the extent and condition of the Catholic population. In the larger dioceses they have been increasing every year. From 3,812 in 1900 the system expanded to 4,972 in 1910, an increase of 30 per cent. Since 1910 284 new schools have been added to the list. The latest enumeration, supplied by the Official Catholic Directory, the only source at present for general statistics of the Catholic Church in this country, gives 5,256 schools, an increase of 137 over the number recorded for 1912.

There has been also a proportionate increase in the number of pupils enrolled. From 1900 to 1910, while the Catholic population increased 35 per cent, there was an increase of 40 per cent in the number of pupils in parochial schools. In 1912 the enrollment was 1,333,786 which increased to 1,360,761 in 1913.

The average attendance is not recorded for the schools of the entire country, but according to the reports of diocesan superintendents for various cities and dioceses it is found to be high. For example, in the last report of the superintendent of the archdiocese of Cincinnati, being that of 1908–9, the average daily attendance of pupils in 36 schools of the city of Cincinnati was 96 per cent; that of 57 schools outside the city, 97 per cent—a general average of 96.5 for 96 schools. From a similar source we learn that the average attendance for 1912 was 91 per cent in the city of St. Louis and 92.4 per cent in the archdiocese of New York. In 1912–13 the ratio of daily attendance to total enrollment was 84 per cent for the archdiocese of Philadelphia and 87 per cent for the diocese of Newark. These dioceses are merely selected as examples of what may be asserted of most of the diocesan systems. They are the only ones whose figures are available.

The total annual expenditure for the maintenance of parochial schools can at best be only estimated. No official statistics on this point are gathered for the entire system. The superintendents of the archdiocese of New York record the cost of maintenance for each year, as for example in 1912–13, it was $745,000, or an average of $9 per pupil enrolled. No other superintendents make it an item in their reports. Catholics know that the cost is much lower than in

public schools; how much lower is a question. The superintendent of St. Louis says on this point, in his report for 1912:

> We are generally of the opinion that the cost of educating a child in the parochial schools amounts to only one-half the sum expended for the education of the public-school child. This is, however, a gratuitous assertion. We have no statistics to substantiate it. The superintendent ought, therefore, to be in possession of the requisite data that would enable him to compute the per capita cost of educating the children of our schools. This would include simply the cost of maintenance; the cost of ground and school buildings could be estimated separately.[1]

The most reasonable estimate so far made of the per capita cost of education in the parochial schools is that of Dr. Burns, in his "Growth and Development of the Catholic School System of the United States." On this point he says (pp. 292–293):

> What is now the *average* cost of Catholic parish-school maintenance per pupil throughout the country? The amount can not be stated with any degree of accuracy. At best no more than a probable estimate can be made at present. The cost appears to vary within almost as wide limits as the cost of public-school education. There are numerous schools in which the total annual per capita cost of maintenance is not more than $5, while in the archdiocese of New York, as has been seen, it is slightly over $11. In particular schools in the large cities the cost runs up to even a much higher figure than this; and in some schools, too, the cost is considerably under $5. But only conditions that are more or less general need be considered, and the above figures may be taken as representing the ordinary extremes. It may therefore be said that the average cost of maintenance per pupil, based upon enrollment, ranges from $5 to $11. The mean of the range is $8, and this may accordingly be taken as the most probable common average of the annual cost of education per capita in the parish schools the country over.

Adopting Dr. Burns's method of calculation, the total expenditure for the maintenance of parochial schools in 1912–13 was about $10,886,088. This is felt to be a conservative estimate, for the statistics of school enrollment recorded for certain dioceses are too low and bear evidence of having been raised not annually, but at most every two or three years. The estimate, however, gives some idea of the fund voluntarily raised each year by Catholics for the kind of elementary education they desire for their children. It is borne in addition to their pro rata tax as citizens for the support of the public schools, but it by no means represents what the State is saved annually by this system of parochial schools.

According to the last Report of the United States Commissioner of Education (1912) the average per capita cost of maintenance in State common schools for 1910–11 was $34.71. This represented the outlay for elementary and high schools, and as our parochial high schools are comparatively few in number it is more equitable to form an estimate according to the cost of elementary education alone. In the Commissioner's Report for 1911 an estimate is found for the elementary, viz, $22.67. Now, Catholic parochial schools

[1] Yearbook of the Superintendent of Catholic Schools, Archdiocese of St. Louis, 1912, 70.

are established in greatest numbers in the North Atlantic, Central, and Western Divisions of our country, and the averages there for State common schools are invariably higher than in the South Atlantic and South Central Divisions. The actual cost to the State of educating the children of parochial schools were they to present themselves as pupils in the public schools would consequently be much higher than this general average of $22.67. Accepting that, however, as a very conservative basis, and estimating according to the average attendance for common schools in 1911–12, 71.4 per cent, the annual cost of instructing the 1,360,088 children in parochial schools would be $21,902,400, and the total annual saving to the State would include interest at 4 per cent on such an outlay, or $22,778,496.

The accommodation of these children in school buildings and equipment would, of course, be a much larger consideration. In 1910 the estimated value of property in State common-school systems was $1,100,007,512, or about $62 per pupil.[1] At this rate the outlay to accommodate the pupils of parochial schools, apart from the cost of maintenance, would be at least $84,325,450.

THE CURRICULUM AND GRADING.

The question of the curriculum for elementary schools was most frequently discussed during the year 1912–13. In the various dioceses there is at present no strict uniformity in the curriculum nor in the grading of the parochial elementary schools. Generally speaking, the eight-grade system prevails and the curriculum is ordinarily determined so as to meet the requirements for entrance into the public high schools, or so as to give a child what is considered a complete elementary education before he attains the working age. In consequence the parochial schools are very similar in grading and curriculum to the public schools. With the increase of parish high schools, which have been established less extensively than elementary schools, more autonomy has resulted, and with it a sense of freedom and confidence for the attainment of better coordination of elementary and secondary work without determination of method or plan by outside influences. There is, however, no general nor fixed conviction that the present system is entirely satisfactory. It has been found inefficient in many respects, and during the past few years the reorganization of curriculum and grading has ranked as one of the leading and most widely discussed questions. In the meeting of the Catholic Educational Association held in Pittsburgh, 1912, it was one of the most seriously, although informally, discussed topics, and again in the recent convention held in New Orleans, 1913. It has

[1] Rep. of U. S. Commis. of Ed., 1911. Vol. II. xxxviii.

been taken up by superintendents in their recent reports, and evidently has been a question of deliberation at the meetings of teachers and school boards.

In the discussion there are clearly two contending parties—one urging the reduction of the eight grades to six and a readjustment of the curriculum so that the elementary course will be completed in six years, and the other maintaining that the present system must, for the present at least, be retained. The first class, curiously enough, does not comprise those engaged in the management of the elementary schools but, for the most part, those whose field is college and high-school work, and their contribution to the discussion is not held to be an impartial nor disinterested view. They maintain usually that the present arrangement of studies and grades in the elementary school is not based on any sound pedagogical principles, but is rather the outgrowth of circumstances; that the course is too elaborate and lengthy; that it is without definite purpose and aim and hence is wasteful of time and energy; that by not admitting differentiation until after eight years, it unduly retards the prospective college student by preventing his early beginning of classical studies, and ultimately his entrance into professional life at a reasonable age.

At the last meeting of the Catholic Educational Association, held in New Orleans, June 29 to July 3, the curriculum was the leading topic of papers and discussions in all departments and sections. The paper read by Rev. Dr. Francis W. Howard, secretary general of the association, formed the basis of much of the discussion. As it gave occasion for the expression of opinion on the side of the secondary and college education departments, we quote the following:

> The curriculum, therefore, is a subject which educators will ever discuss, and on which the last word will never be said. American educators freely acknowledge the evils that exist to-day and are insistent in the demand for reform. Out of this ferment will come some rational plan of education, or at least more order than now prevails; and if this surmise be correct, then the present time is fraught with great importance and significance for Catholic educators. * * *
>
> In dealing with the problem of the curriculum from the standpoint of Catholic educators, we are confronted with several different lines of action.
>
> (1) Shall we conform to the secular system in subjects, textbooks, management of courses, grading and adjustment of the various departments of the system, with the addition of religious instruction, and Catholic philosophy?
>
> (2) Shall we endeavor to arrange our work in entire independence of the State system?
>
> (3) Shall we endeavor to make a systematic study of present conditions, inquire into the causes of present confusion, and endeavor to formulate the principles of some sound system of Christian education that will be in substantial accord with the reasonable features of the secular education of the day, and at the same time insure us a moderate and reasonable measure of independence?
>
> Time does not permit a discussion of these various lines of action, and we pass them over with the statement that by adopting the first we face gradual extinction; the second is impossible for us, and the most prudent thing for us to do is to adopt the

third plan outlined. The time has come in this country when we should decide whether we can have a plan of our own or whether we shall be content to imitate the experiments and follow the changes of secular education.[1]

Brother John Waldron, S. M., of Clayton, Mo., upheld Dr. Howard's view that elementary work should be completed in six grades, maintaining that—

pedagogical, psychological, and physiological motives urge us to introduce a change in the aim, nature, and methods of instruction when the boy enters the adolescent stage of his life. Administrational demands alone may urge a delay, but even from the administrator's point of view the wisdom of differentiation at this age is becoming more generally recognized.

I believe the majority of college men will agree with me that it is better for the boy to pass directly into the preparatory class of the secondary department after a thorough six-year course of elementary training in correct habits of study and discipline than have him linger along during two additional years to do what will bring him no gain for college purposes.

It was stated in the discussion that the arguments advanced for the change in curriculum did not imply that the present program of eight grades should be done in six years, "nor that the present parochial system of eight grades should be cut down to six." It was contended rather that—

the first six years of school should be devoted to elementary work, with insistence on thoroughness and intensity, and then instruction should become secondary in character; whether the boy passes over to high school or college control, or, as will happen with the vast majority, he remains for at least two years longer in the parochial system.

In the college department of the association the discussion reached the point where the following resolution was passed, not as a general resolution of the association, but as a departmental one.

As there seems to be a general agreement among educators that pupils entering the secondary schools from the eighth grade are too far advanced in age and that secondary education should begin at or about the age of 12, we favor an arrangement whereby pupils may be able to begin their high-school course after the completion of 6 years of elementary work.[2]

The party in opposition to the proposed change numbers a large and influential body of teachers, pastors, and many superintendents of diocesan-school systems—those who are immediately in control of elementary education and actively concerned with its peculiar problems. They are not convinced that the prevailing arrangement is perfect or entirely satisfactory, but neither are they favorably impressed by the remedies suggested for improvement. Whereas those interested in college and secondary education have deplored the length of the elementary course in years, this party has found one of its chief difficulties in the fact that great numbers of children depart

[1] Rep. of Proc. and Addresses of the Tenth Annual Meeting of Cath. Ed. Assoc., New Orleans, June 30-July 3, 1913, p. 139.

[2] Ibid.

from their influence and care too early, i. e., to enter the public high school or to work, and this at a time in their lives when for many reasons the influence of the Catholic school is considered necessary. The shortening of the course in years would not help the situation, but rather, so it is thought, aggravate it. Whatever may favorably be said of the early beginning of secondary work in the parochial school, the fact is alleged that the pupil would then be ready for the preparatory college or for secondary work under other auspices, as well as under the auspices of the parochial school. Furthermore, it is shown that the elementary school is to-day maintained with hardship and many sacrifices by great numbers of parishes. For them the organization of the high-school department in equipment and teachers would be an impossibility if the school were to give courses equal or superior to those offered by the public high schools to which the children have ready access.

On this matter, Rev. John A. Dillon, superintendent of schools, diocese of Newark, N. J., writes in his report for 1912–13:

> The committee of the Catholic Educational Association (committee on the reform of the curriculum) seemed to feel that a change at this time would be inexpedient, because, unfortunately, we are almost entirely dependent on the State school system; and if we alone abridged the curriculum in our elementary schools our graduates might be refused the privileges which are granted to the graduates of the public elementary schools, thus not only handicapping our children but also probably bringing about a depreciation of the splendid work done in our schools. It is to be regretted that this dependence is mainly due to the fact that we have so few free Catholic high schools as a part of our diocesan-school system. Their absence makes us dependent, much as we dislike it, even where the opinion seems to be general that time could be saved or at least put to better use.[1]

PAROCHIAL HIGH SCHOOLS.

The Catholic high-school movement grows stronger each successive year; and in that phase which concerns us here, the parochial high school, there is noticeable at present an interesting development. When the committee on high schools of the Catholic Educational Association reported in 1911, it was estimated that there were between four and five hundred parochial schools doing high-school work.[2] No general statistics of a trustworthy nature have been compiled since that time, but there are many evidences of the spread of the movement. The committee reported on 295 and found that each of 252 was directly connected with a single parish school, while only 15 of them were directly connected with several parish schools. The report stated:

> Nearly all of the schools are the offshoots of single parish schools. Even in towns and cities which boast of a number of large and well-equipped parish schools, with

[1] Third Report of the Superintendent of Parish Schools, Diocese of Newark, 30.

[2] Cf. Rep. of Proc. and Addresses of Eighth Annual Meeting of the Cath. Ed. Assoc.: Chicago, 1911, p. 45.

thousands of pupils, no attempt is made, as a rule, to build up a central high school with which all the existing parish schools would be made to fit in.[1]

In the most conspicuous examples of high-school foundations which have taken place since that report was rendered, the central high school, rather than the single parish high school, was adopted and apparently with good results. In 1911 three high-school centers were opened in the city of St. Louis and in the report of the superintendent for that year it is stated:

> On the whole we have reason to feel highly pleased with our success in the past year. * * * Our financial support was more than could be expected from the outset. * * * We had expected to remain at least two years in our present quarters. Owing, however, to our extraordinary membership, we shall be constrained to seek more commodious schools for the continuance of our work so auspiciously inaugurated.[2]

In the city of Philadelphia the new Catholic Girls' High School, which was opened September, 1912, to be the crowning element in the parish school system for the education of girls, and to emulate in efficiency the Catholic Boys' High School, successfully operated since 1890, has after one year fully realized the hopes of its founders. Monsignor P. R. McDevitt, superintendent of schools for Philadelphia, says of it in his latest report (1913):

> The most notable event in our scholastic year was the opening of the Catholic Girls' High School on the 18th of September, 1912. This new high school is the logical development of the high school centers for girls, which were organized in September, 1900, to provide a two-year course for the graduates of the parish schools. The high school will continue in broader lines the work of the high school centers, and will for the present provide two courses, viz: General course, four years—courses determined upon in order to meet what are considered the special needs of the great body of our Catholic girls. * * * The graduates of the eighth grade of the parish schools who entered the high school in September, 1912, numbered 326, all of whom followed the uniform schedule prescribed for the first year.[3]

This Catholic high school is not owned by a single parish, nor by several parishes. It is a diocesan institution, under the immediate direction of the archbishop. It marks a new departure in Catholic education, for the high school is usually owned by the parish or teaching community in charge of it. A detail of administration of special interest concerns the teaching staff, which is formed from the members of four different religious communities of nuns. Each separate community is given charge of a department, and the roster of studies is so arranged that one community does not encroach upon another community's province. At present the faculty consists of 16 nuns, 1 lay teacher, and the superintendent of parish schools, who is acting as principal. The latter writes of the arrangement:

> Although one year, perhaps, is too short a time to form a final judgment of the value of this experiment in the administration of the Catholic high school, its present success

[1] Cf. Rep. of Proc. and Addresses of Eighth Annual Meeting of the Cath. Ed. Assoc: Chicago, 1911, p. 52.

[2] Year Book of the Superintendent of Catholic schools, Archdiocese of St. Louis, 1912, p. 42.

[3] Nineteenth An. Rep. of Supt. of Parish Schools of Archdiocese of Philadelphia, for the year ending June 30, 1913, p. 9.

warrants the hope and the belief that a plan which has so many points in its favor will ultimately prove its feasibility and efficiency.[1]

STANDARDIZATION OF HIGH SCHOOLS.

The report of the committee on high schools of the Catholic Educational Association, referred to above, showed that only 19 of the parochial high schools were affiliated with Catholic colleges, while 56 were affiliated or in some way connected with non-Catholic colleges, normal schools, and State universities. The committee pleaded for a more general recognition of them on the part of Catholic colleges in order to promote a closer organization of the educational system.

> Here, surely, is a situation that is full of significance [the committee reported]. For it means that our secondary schools, which ought to form a natural and easy passageway from the parish schools to the Catholic colleges, are, in steadily increasing numbers, being drawn into such academic relationships as will make it a most easy, if not an inevitable thing, for the Catholic boy, on finishing his course in our schools, to pass up to a non-Catholic college.[2]

A significant movement looking to a better articulation of all the elements in the Catholic educational system, and especially tending toward the standardization of secondary schools, was inaugurated by the Catholic University of America on April 17, 1912, when the trustees agreed to affiliate with the university all secondary schools which could comply with its conditions. The trustees thus announced their action:

> Pope Leo XIII, the founder of the Catholic University, says in his apostolic letter, "Magna Nobis Gaudia," of March 7, 1887: "We exhort you all that you shall take care to affiliate with your university your seminaries, colleges, and other Catholic institutions according to the plan suggested in the constitutions, in such a manner as not to destroy their autonomy." The Pope in these words seems to have realized what has since become an urgent need in our educational system and to have anticipated a movement that is now quite general among our teaching communities. The establishment of the schools of philosophy, letters, and science, offering courses of special interest and utility to lay students, naturally suggested some sort of articulation between the university and the colleges. On the other hand, the Sisters who attended the first session of the university summer school in 1911 have frequently expressed their desire for affiliation with the university, in preference to any arrangement that might be offered by other universities, and some of our institutions have already applied for affiliation.
>
> Any Catholic high school may be affiliated on the following conditions:
>
> (1) The high school must give a course extending over four years and including a total of 15 units, of which at least 3 must be devoted to English and 3 to some other subject. (Meaning of a unit: A subject, e. g., English, pursued four or five hours a week for a school year of from 36 to 40 weeks.)
>
> (2) The subjects required, with their respective values, are: Religion, 2 units; English, 3 units; some other language, 2 units; mathematics, 2 units; social science (including history), 1 unit; natural science, 1 unit. Four units to be elective. They must be selected in such a way, however, as to give another course of 3 units, i. e., one or more units must be advanced work in one of the subjects, other than English,

[1] Nineteenth An. Rep. of Supt. of Parish Schools of Archdiocese of Philadelphia, for the year ending June 30, 1913, p. 9.

[2] Ut supra, 54.

enumerated above. Where Latin is to be pursued in college, at least 2 units of Latin must be taken in the high school.[1]

In case of affiliation the university agrees to furnish the institution with an assignment of the matter for each subject offered in the curriculum, and to send at the end of the year a set of examination questions sealed, which are to be opened in the class when assembled for examination. The papers are then to be sealed in the presence of the class and forwarded to the university, where they will be examined and marked according to a certain scale. All students who successfully pass the examinations held during the four years in the high school shall be admitted without further examination in these subjects to any college affiliated by the university.

The invitation of the university was eagerly accepted by many Catholic secondary schools. Some were ready to comply with its requirements immediately, and others signified their intention of rearranging their curriculum and seeking affiliation as soon as possible. During the year 1912–13, 47 high schools and academies were duly affiliated, accepting the common standard offered by the university, and the prospects are that many more will be placed on the list of affiliated schools during the year 1913–14. This movement undertaken by the university is the first organized effort made by any Catholic institution for the standardization of the secondary schools of the system, and its influence on the future parochial high schools is bound to be great. Something of its extent and representative nature will appear from the following list of high schools already affiliated, grouped under their respective States:

California.—College of Notre Dame (high school department), San Francisco; College of Notre Dame (high school department), San Jose; Notre Dame High School, San Jose.

Colorado.—St. Mary's Academy, Denver; Loretto Heights Academy, Loretto.

Connecticut.—Notre Dame Academy, Waterbury.

Georgia.—Mount St. Joseph's Academy, Augusta.

Indiana.—St. Mary-of-the-Woods, Terre Haute.

Kentucky.—Academy Notre Dame of Providence, Newport.

Massachusetts.—Academy of Notre Dame, Lowell; Academy of Notre Dame, Roxbury; Boston Academy of Notre Dame, Boston.

Michigan.—St. Ambrose High School, Ironwood; St. Mary's College and Academy, Monroe.

Minnesota.—Villa Sancta Scholastica, Duluth.

Missouri.—Loretto Academy, Kansas City; St. Joseph's Academy, St. Louis.

New York.—Mary Immaculate Academy, Buffalo; St. Joseph's Academy, Lockport.

Ohio.—Mount St. Vincent Academy, Notre Dame Academy (Grandin Road), Notre Dame Academy (Court Street), Notre Dame Academy (East Sixth Avenue), Cincinnati; Ursuline Academy, Cleveland; St. Joseph's Academy, Columbus; Notre Dame Academy, Dayton; Notre Dame Academy, Hamilton; Mount St. Joseph-on-the-Ohio,

[1] Cf. "For the affiliation of colleges and high schools to the university," Catholic Educational Review, May, 1912 (Vol. III, 445).

Mount St. Joseph; Ursuline Academy, Nottingham; Mount Notre Dame High School, Reading.

Oregon.—St. Mary's Academy, Portland.

Pennsylvania.—Academy of Notre Dame, Philadelphia; St. Joseph's Academy, Greensburg; Holy Rosary High School, Pittsburgh; Mount St. Mary's Academy, Scranton.

Texas.—St. Edward's Academy, Our Lady of Good Counsel Academy, Dallas, St. Xavier's Academy, Denison; St. Ignatius Academy, Our Lady of Victory Academy, Fort Worth; Our Lady of the Lake, College and Academy of the Incarnate Word, San Antonio; St. Joseph's Academy, Sherman; Sacred Heart Academy, Waco, Mary Immaculate Academy, Wichita Falls.

Wisconsin.—Holy Angels Academy, Milwaukee; St. Clara Academy, Sinsinawa.

IMPROVEMENT OF TEACHERS.

Agencies for the improvement of teachers both during the period of preparation and while in service are increasing in number and efficiency. In recent years the novitiates of religious communities, which are the normal schools of teaching brotherhoods and sisterhoods, have been better able to follow the injunctions of the Third Plenary Council of Baltimore regarding the pedagogical training of the future teachers, and instances are becoming yearly less common of the young novices being sent out to the schools before the completion of their religious and pedagogical training.

The mother houses are also active in conducting summer schools for teachers in the field. The services of university and college professors, and of special instructors in addition to some of their own experienced teachers, are annually enlisted for courses of five and six weeks' duration. Some communities have for years followed the custom of recalling to the mother house each summer all of their teachers to participate in the summer school; others recall teachers of certain departments or grades alternately, so that all teachers have the advantage of this summer course every second or third year. In the summer schools the courses usually followed embrace educational psychology, methods of teaching and management, and, where the communities are engaged in secondary work, some of the academic as well as the professional subjects. In certain recent summer schools a number of courses have been given in the methods of teaching religion.

Teachers' institutes are also held for the especial benefit of teachers in the service. These usually last four or five days and, while single and combined communities have often conducted them, the usual plan at present is to hold them under diocesan auspices. During the year 1913 such institutes were reported in the dioceses of Boston, Mass.; Hartford, Conn. (where a summer school was also held); Portland, Oreg.; and Los Angeles, Cal.

Summer schools under university and collegiate auspices, offering educational courses, were successfully conducted in 1913 at Marquette University, Milwaukee, Wis.; De Paul University, Chicago, Ill.; Duquesne University, Pittsburgh, Pa.; Creighton University, Omaha, Nebr.; and at the Catholic University of America, Washington, D. C. The last-named, being the summer session of teachers' college, had the largest and most representative attendance; 383 students were enrolled, all of whom except 22 were teaching nuns who belonged to 75 distinct branches of religious communities. They came from 29 States of this country and from Canada, and represented 48 American dioceses.

The teachers' college of the Catholic University, which was founded in 1911 for the higher education of Catholic women teachers, is regarded as the most potent agency of its kind ever established by the Catholic Church in this country. In its regular and summer sessions it has thus far (1913) enrolled 1,111 students. Besides the preparation of teachers for the colleges and secondary schools, a special phase of its work is the training of teachers for the community normal schools, or novitiates, who will later be intrusted with the professional formation of the general body of teachers for the parochial schools.

Table 2 gives the general statistics for parochial schools in all of the dioceses of the United States for the school years 1911–1912 and 1912–1913. The Catholic population for each diocese is also given. The figures are taken from the Official Catholic Directory and from the reports of diocesan superintendents of schools. Since 1911 the Official Catholic Directory, issued usually in February or March, has gathered the school statistics in October; the figures consequently in the 1913 directory represent the enrollment for the school year 1912–1913.

TABLE 1.—*Diocesan school boards and supervising officers.*

[Archdioceses are indicated by an asterisk (*).

Ecclesiastical province.	Diocese or archdiocese.	Title of governing board and number of members.	Name and title of supervising officer.
Baltimore	*Baltimore	Examiners of teachers (2)	Rev. Lawrence Brown, superintendent (Baltimore city).
		Examiners of schools:	
		For Baltimore (4)	
		For Washington (3)	
		For rural districts (4)	
	Richmond	Examiners of schools:	
		Northern and western district (2)	
		Southern and eastern district (2).	
	Wheeling	Examiner of schools:	
		3 district boards (3, 2, and 2)	
	Wilmington	School board (4)	
Boston	*Boston		Rev. George A. Lyons, supervisor of schools.
	Burlington	School board (3)	
	Fall River	Diocesan school visitors (2)	
	Hartford		Rev. W. J. Fitzgerald, S. T. L., diocesan supervisor of schools.
	Portland	School visitors (4)	
	Providence	Examiners of teachers (3)	
		Examiners of schools (9)	
		School board (2)	
	Springfield		Rev. John F. Conlin, P. R., diocesan school visitor; Rev. P. F. Doyle, assistant diocesan school visitor.
Chicago	Alton	Diocesan school board (6)	
	Belleville	Diocesan school board (6)	
	*Chicago	Diocesan school board (14)	
	Rockford	School board:	
		3 district boards (6, 6, and 4)	
Cincinnati	Columbus	School board (5)	Rev. John J. Murphy, superintendent of schools.
	Detroit	Examiners of teachers (7)	
		School board:	
		6 district boards (10, 10, 4, 3, 3, and 4).	
	Fort Wayne	Diocesan school board (10)	Rev. A. E. Lafontaine, superintendent of schools.
	Cleveland		Rev. William A. Kane, superintendent.
	Grand Rapids	School board (4)	
	Louisville	School board (10)	
	Nashville	Examiners of teachers and diocesan school board (6)	
	Toledo	School board (8)	
Dubuque	Davenport	School board:	
		5 district boards (3, 3, 2, 2, and 2).	
	Lincoln	Diocesan school board (5)	
	Omaha	Diocesan examiners of teachers (2)	
		Diocesan school board (11)	
		6 local school boards	
	Sioux City	Diocesan school board (6)	
Milwaukee	Green Bay	Diocesan school board (3)	
	La Crosse	School board (7)	
	Marquette	School commission (6)	
	*Milwaukee	Diocesan school board (8)	
	Superior	School commission (5)	
New Orleans	Dallas		Rev. L. J. Harrington, school examiner.
	Galveston	Diocesan school board (4)	
	Little Rock	Diocesan school board (6)	Rev. Thomas V. Tobin, superintendent.
	*New Orleans	Catholic board of education (16) (11 ecclesiastics, 5 laymen).	Rev. L. J. Kavanagh, superintendent.
New York	Albany	Diocesan school examiners (9)	Rev. Joseph A. Dunney, inspector of schools.
	Brooklyn	Kings County school board (21)	Rev. Joseph D. McKenna, inspector of schools.
		Queens County school board (6)	
		Nassau County school board (7)	
		Suffolk County school board (7)	
	Buffalo	Diocesan school board (8)	Rev. Edmund F. Gibbons, superintendent of parochial schools; Rev. C. A. Maxwell, Ph. D., D. D., assistant superintendent.

TABLE 1.—*Diocesan school boards and supervising officers*—Continued.

Ecclesiastical province.	Diocese or archdiocese.	Title of governing board and number of members.	Name and title of supervising officer.
New York	Newark	School board (15)	Rev. John A. Dillon, superintendent of schools.
	*New York	New York City and Yonkers school board (22).	Rev. Joseph F. Smith, superintendent.
		Westchester County school board (6).	Rev. Michael J. Larkin, superintendent.
		Orange and Rockland Counties school board (7).	
		Ulster and Sullivan Counties school board (4).	
		Putnam and Dutchess Counties school board (5).	
	Ogdensburg	School board (7)	
	Rochester	School board (2)	
	Syracuse	School board: 2 district boards (3 and 3)	
	Trenton	Examiners of teachers (4)	Rev. William J. McConnell, superintendent of parochial schools.
		Examiners of schools: 5 district boards (4, 4, 5, 5, and 4).	
Oregon	*Oregon City	Diocesan school board (6)	Rev. Edwin V. O'Hara, diocesan superintendent of schools.
Philadelphia	Erie		Rev. John M. Gannon, D. D., D. C. L., superintendent of schools.
	Harrisburg	School board (10)	
	*Philadelphia	Diocesan school board (11)	Right Rev. Mgr. P. R. McDevitt, superintendent of parochical schools; Rev. John E. Flood, assistant superintendent.
	Pittsburgh	Examiners of school teachers (8)	Rev. H. C. Boyle, superintendent of schools.
		Diocesan school board (25)	
St. Louis	Concordia	Diocesan school board (4)	
	Kansas City	Diocesan school board (6)	
	Leavenworth	Diocesan school board (9)	
		Diocesan high-school board (3)	
	*St. Louis	Diocesan school board (13)	Rev. A. V. Garthoeffner, superintendent of schools.
	Wichita	Diocesan school board (4)	
St. Paul	Bismarck	Parochial school board (5)	
	Crookston	School board (6)	Rev. Gerald Speilman, O. S. B., diocesan superintendent of schools.
	Duluth	School board (7)	
	Fargo		Very Rev. J. Baker, V. G., inspector of schools.
	St. Cloud	Diocesan school board (6)	
	*St. Paul	School board (6)	
	Sioux Falls	Diocesan school board (6)	
	Winona	School board (7)	
San Francisco	Monterey-Los Angeles.	Inspectors of diocesan schools (8)	
Santa Fe	Denver	School board (5)	

TABLE 2.—*General statistics of parochial schools in 1912 and 1913.*

[Archdioceses indicated by asterisk (*).]

Ecclesiastical province.	Dioceses included in province.	1912			1913		
		Catholic population.	Pupils.	Schools.	Catholic population.	Pupils.	Schools.
Baltimore (Includes Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, eastern Florida.)	*Baltimore	260,000	25,580	84	260,000	24,000	84
	Charleston (S. C.).	9,650	743	9	9,650	890	9
	Richmond	41,000	5,400	24	41,000	4,440	21
	St. Augustine	37,525	1,856	18	37,525	1,856	18
	Savannah	17,240	3,242	16	17,840	3,342	17
	Wheeling	48,500	1,975	14	52,000	3,070	18
	Wilmington (Del.)	35,000	3,839	13	35,000	3,921	13
	North Carolina	6,506	1,081	12	6,702	1,379	15
Boston (Includes Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.)	*Boston	900,000	57,281	117	900,000	59,293	119
	Burlington	77,389	5,688	20	79,230	6,224	20
	Fall River	158,090	12,431	29	160,000	12,116	29
	Hartford	412,973	34,375	81	423,000	34,514	81
	Manchester	126,034	13,100	40	126,034	16,605	41
	Portland	123,547	11,500	31	123,600	11,454	33
	Providence	255,000	17,550	32	260,000	18,363	36
	Springfield	323,122	27,451	64	323,435	27,451	65
Chicago (Includes Illinois.)	Alton	80,000	9,198	66	80,000	9,317	66
	Belleville	71,400	9,698	76	71,500	10,000	77
	*Chicago	1,150,000	102,700	218	1,150,000	105,898	227
	Peoria	96,000	11,976	69	104,487	11,152	70
	Rockford	50,000	4,300	26	50,000	4,219	26
Cincinnati (Includes Ohio, Indiana, Kentucky, Tennessee, lower Michigan.)	*Cincinnati	200,000	28,351	118	200,000	28,596	120
	Cleveland	331,000	41,215	136	350,000	42,376	138
	Columbus	89,271	11,356	55	93,065	12,229	57
	Covington	60,000	7,390	38	60,300	7,084	38
	Detroit	317,820	31,258	86	342,005	32,779	87
	Fort Wayne	105,523	15,884	86	108,719	16,689	87
	Grand Rapids	149,000	17,108	82	128,000	16,514	75
	Indianapolis	122,172	16,981	120	124,045	17,732	121
	Louisville	98,945	11,705	63	102,928	13,191	71
	Nashville	18,500	3,352	24	18,500	3,605	23
	Toledo	125,000	12,470	61	100,000	14,096	68
Dubuque (Includes Iowa, Nebraska, Wyoming.)	Cheyenne	12,000	150	1	12,500	108	1
	Davenport	50,125	5,975	44	51,175	6,015	44
	Des Moines	25,000	1,579	16	25,000	2,437	17
	*Dubuque	130,500	25,000	85	132,560	25,890	86
	Kearney	.....	.....	.....	15,195	305	3
	Lincoln	38,120	2,405	24	27,500	2,000	24
	Omaha	92,635	9,921	81	75,575	9,364	78
	Sioux City	56,000	7,576	53	58,000	7,702	54
Milwaukee (Includes Wisconsin, northern Michigan.)	Green Bay	139,660	17,972	106	140,433	18,482	105
	La Crosse	116,000	10,238	77	117,000	10,308	75
	Marquette	96,500	7,337	25	98,500	7,381	25
	*Milwaukee	250,000	34,209	145	250,000	34,786	152
	Superior	51,043	4,797	22	51,043	4,870	23
New Orleans (Includes Louisiana, Alabama, Mississippi, Texas, Arkansas, Oklahoma, western Florida.)	Alexandria	33,000	1,123	17	34,000	1,623	16
	Corpus Christi	.....	.....	.....	82,400	1,150	9
	Dallas	62,000	4,976	31	64,000	5,902	37
	Galveston	62,000	3,924	37	65,000	4,407	39
	Little Rock	23,000	3,564	44	23,000	3,385	43
	Mobile	40,000	4,638	32	41,079	4,881	32
	Natchez	27,700	2,764	19	28,578	2,764	19
	*New Orleans	550,000	15,891	126	550,000	16,835	126
	Oklahoma	36,937	4,488	40	35,432	6,078	41
	San Antonio	95,000	5,914	46	95,000	6,598	50
New York (Includes New York State, New Jersey.)	Albany	201,246	19,011	50	201,246	18,302	48
	Brooklyn	700,000	67,250	80	700,000	57,250	80
	Buffalo	267,000	32,781	117	273,000	33,240	125
	Newark	367,000	53,152	116	370,000	53,352	120
	*New York	1,219,920	79,049	322	1,219,920	82,346	332
	Ogdensburg	94,000	4,082	15	95,000	3,795	15
	Rochester	144,447	20,321	57	150,000	19,565	58
	Syracuse	151,463	8,955	21	151,463	9,377	22
	Trenton	135,000	13,903	44	136,000	14,119	46
Oregon (Includes Oregon, Washington, Idaho, Montana, Alaska.)	Baker City	6,500	790	6	6,400	850	6
	Boise	16,000	785	10	16,000	1,326	10
	Great Falls	24,000	490	3	25,000	885	7
	Helena	61,000	5,500	21	62,000	5,711	21
	*Oregon City	55,000	5,000	36	60,000	5,200	40
	Seattle	90,000	5,091	32	90,000	5,852	34
	Alaska	14,500	242	5	11,500	301	7

TABLE 2.—*General statistics of parochial schools in 1912 and 1913*—Continued.

Ecclesiastical province.	Dioceses included in province.	1912			1913		
		Catholic population.	Pupils.	Schools.	Catholic population.	Pupils.	Schools.
Philadelphia (Includes Pennsylvania.)	Altoona	84,760	8,150	32	92,810	8,827	34
	Erie	121,500	10,413	45	125,000	11,257	45
	Harrisburg	56,665	9,000	40	55,543	9,000	40
	Philadelphia	604,000	65,312	135	605,000	65,312	149
	Pittsburgh	475,000	45,593	145	480,000	46,261	150
	Scranton	275,000	17,642	71	275,000	17,750	73
St. Louis (Includes Missouri, Kansas.)	Concordia	29,000	3,847	34	29,000	3,911	35
	Kansas City	55,000	5,543	42	60,000	6,479	48
	Leavenworth	60,000	6,000	40	70,000	6,150	53
	St. Joseph	35,000	3,054	24	35,000	3,019	24
	*St. Louis	365,000	31,182	170	375,000	30,065	164
	Wichita	32,000	2,393	35	32,000	2,819	34
St. Paul (Includes Minnesota, South Dakota, North Dakota.)	Bismarck	28,300	1,450	9	30,000	1,462	9
	Crookston	20,705	560	7	21,147	995	7
	Duluth	37,375	1,340	7	38,650	1,700	9
	Fargo	65,571	650	14	69,871	1,624	15
	Lead	18,000	1,030	5	18,000	841	6
	St. Cloud	64,200	5,235	33	65,000	4,000	23
	*St. Paul	265,000	21,980	93	265,000	22,100	93
	Sioux Falls	55,000	2,590	23	55,000	3,565	27
	Winona	60,000	5,469	30	65,000	7,000	30
San Francisco (Includes California, Nevada, Utah.)	Monterey and Los Angeles.	100,000	5,709	31	103,000	8,467	31
	Sacramento	48,500	1,634	9	48,500	1,058	9
	Salt Lake	11,500	237	4	12,000	273	4
	*San Francisco	251,000	17,000	42	252,000	15,491	46
Santa Fe (Includes Colorado, Arizona, New Mexico.)	Denver	105,000	6,417	27	105,000	6,679	27
	*Santa Fe	140,573	2,431	19	140,573	3,019	19
	Tucson	48,500	1,841	10	52,000	2,000	10
Total		15,015,569	1,333,786	5,119	15,154,158	1,360,761	5,256

CHAPTER XVI.

THE PROBLEM OF JEWISH EDUCATION IN AMERICA AND THE BUREAU OF EDUCATION OF THE JEWISH COMMUNITY OF NEW YORK CITY.[1]

By Israel Friedlaender.

Contents.—History and composition of American Jewry—The Spanish Jews—The German Jews—The Russian migration—Jewish education now a complicated problem—Difficulties peculiar to New York City—Means for improvement—The Jewish Bureau of Education—The Talmud Torahs selected for perpetuation—The plan of the curriculum—Financial cooperation—Provisions for standardization—Results achieved—Preparatory schools—Textbooks and methods—The problem of teachers—Extension teaching—Conclusion.

HISTORY AND COMPOSITION OF AMERICAN JEWRY.

The first systematic attempt to deal with the problem of Jewish education in America in its various phases is of recent origin.

In order to realize the magnitude of the problem and the peculiar difficulties which constantly present themselves in coping with it, it is necessary to take a larger view of our topic and to inquire into the general historic and cultural conditions which have brought about the present educational situation in American Jewry and the remarkable complications connected with it.

Our inquiry must naturally begin with the history and composition of American Jewry as it is constituted at present. The Jewry of America is the product of three successive waves of immigration, which may be designated as the Spanish, the German, and the Russian.

THE SPANISH JEWS.

The first Jews who came to this country were descendants of those who had been exiled from the Iberian Peninsula in 1492, the year in which America was discovered. They came to this country principally by way of central and southern America. For reasons which

[1] The significance of the title is apparent. The paper relates to Jewish education, not the education of the Jews. The schools fostered by the Bureau of Education of the Jewish community are designed to impart a knowledge of Judaism and its religious institutions. The children who attend them are also pupils of the public schools. The work described is unique in American educational history. The author writes from abundant knowledge of the conditions, for he is chairman of the board of trustees of the bureau. (Editor.)

need not detain us here, their numbers have gradually decreased; and, while there still exist, as a monument to their past glory, a few of their congregations with attached schools, and though a number of them still take an active and honorable part in American Jewish affairs, they have yielded the predominant influence to the more recent settlers and represent no distinct phase of the Jewish problem. Very recently a new immigration of so-called Spanish Jews, proceeding from the Turkish Empire and the Balkans, has been wending its course to this country and is slowly forcing itself upon the attention of Jewish workers and educators, but it is not yet of sufficient importance to affect the general aspect of Jewish life or Jewish education.

THE GERMAN JEWS.

The second wave of Jewish immigration came from Germany, principally from south Germany, and, apart from a number of individuals who came early in colonial times, it fell between the years 1830 and 1870. It began as a result of the distress caused by the Napoleonic wars and reached its climax in consequence of the revolutionary upheavals in central Europe in 1848.

To appreciate the educational standards and ideas which these settlers brought with them, and which they subsequently tried to adapt to their new environment, we must bear in mind that the majority of these immigrants came from rural communities, for the Jews of Germany of that period lived to a far greater extent on the land than they do at present. The great cultural reform inaugurated by Moses Mendelsohn (1729–1786), which in a surprisingly short time had pushed the German Jews from the isolated recesses of their ghettos to the forefront of European civilization, did not have the same revolutionizing and frequently disintegrating effect upon the smaller communities. Yet it succeeded in conquering their deep-seated prejudice against secular education. The Jews even in the smaller communities spoke the same language (though often with a slight dialectic modification), wore the same dress, and were, above all, molded by the same education as their fellow Germans; and they lived, on the whole, on friendly terms with their non-Jewish neighbors. As far as Judaism is concerned, they were, with rare exceptions, strictly orthodox, loyal to the teachings of their ancestral religion and staunch in the observance of its practices. Their Jewish educational standards were simple, like their conditions of life. The reading of the Hebrew prayers, a fair acquaintance with the Five Books of Moses in the original, with a few selections from the other books of the Bible, a working knowledge of the Jewish ritual, and, as a token of particular excellence, a glimpse into post-

biblical Hebrew literature, exhausted the educational ambitions of these simple-minded, but staunch-hearted, Jewish immigrants.

The impetus which drove the German Jews to these shores was not a sudden outbreak, but a slow and steady process, and their immigration proceeded in a similar manner. Settling at a time when the opportunities in this country were many, the German Jewish immigrants, who combined German industry and love of discipline with Jewish sobriety and intelligence, made rapid strides and attained influence and prosperity. They found it comparatively easy to reproduce their religious and educational institutions in the new environment. Their religious life centered around their newly established congregations, which, as a result of their love of order and their marked organizing ability, soon became flourishing institutions. Their educational demands were supplied by the so-called congregational school which was connected with the congregation and was generally under the supervision of its rabbi.[1]

Sunday schools.—Another educational factor was soon added in the form of the Sunday school, so called because the instruction there was limited to Sunday mornings. The Sunday school was originally independent of the congregation, although this changed considerably in the later course of development.[2] Such a school was founded as early as 1838 in Philadelphia, largely in cooperation with the Spanish Jewish element; and the progress of this type of educational institution may fairly be gauged from the fact that the school just mentioned has gradually grown into an association which, at its recent seventy-fifth anniversary (March 2, 1913), maintained in that city 13 schools, with more than 4,000 children.

Simplification due to the reform movement.—The problem of Jewish education as affecting this section of American Jewry was still more simplified by the advent of the so-called Jewish reform movement, which was introduced from Germany after 1850. Under its influence most of the Jewish religious ceremonies were abolished and the rôle of Hebrew as a religious medium was considerably diminished. Jewish education, thus freed from its heaviest burden, was confined practically to a general acquaintance with the Hebrew prayers still retained in the reformed liturgy, an exposition of the Jewish principles of faith and a smattering of Jewish history.

[1] Some of the earliest Jewish schools established in this country supplied at the same time a secular education. A few schools founded subsequently by Russian Jews on a similar parochial plan are still in existence to-day. But as they are too few to affect the problem of Jewish education as a whole, they have been left out of account in the present sketch.

[2] At present most Jewish Sunday schools are connected with congregations, mostly of the reform type. "Congregational schools" are now usually those which are connected with congregations of a more conservative type and hold more than one session a week.

The generosity and spirit of organization which, aided by greater prosperity, are so admirably displayed in the philanthropic institutions of this section of the American Jewish community have also, though to a less extent, manifested themselves in their educational endeavors. The Union of American Hebrew Congregations and the Central Conference of American Rabbis, the two largest organizations of Reform Judaism, have given, particularly in the last few years, a great deal of attention to the problem of Jewish education. The former organization has established a synagogue and school extension department, under the direction of Rabbi George Zepin. It is also interested, in conjunction with the latter organization, in the publication of Jewish textbooks.

An attempt to organize the Jewish Sunday schools in the eastern States was recently made in New York. The Jewish Chautauqua Society, founded in 1893 by Dr. Henry Berkowitz, for the dissemination of Jewish religious knowledge is developing a widespread activity, which includes schoolwork, though its emphasis is directed toward the Jewish youth of a more mature age. In 1905 a field-secretary department was created, and in 1912 a correspondence school for religious school teachers was established by the Chautauqua society under the direction of Dr. Rosenau in Baltimore.

Institutions for higher education.—In this connection mention should also be made of other educational institutions, which, though largely called forth by the later influx of the Russian immigrants and primarily designed for their benefit, yet owe their origin to the generosity and organizing ability of the German Jews. Such institutions, serving partly other purposes than those of primary Jewish education, are the Hebrew Union College in Cincinnati (founded in 1875) and the Jewish Theological Seminary of America in New York (founded in 1886, reorganized in 1902) for the training of rabbis, the two teacher's institutes subsequently founded under their respective auspices, the Gratz College of Philadelphia founded previously (in 1875) also for the training of Jewish teachers, the Dropsie College for Hebrew and Cognate Learning (founded in 1907) for postgraduate studies and a few other agencies for the propagation of Jewish knowlege, which may be left out of consideration in this account.

THE RUSSIAN MIGRATION.

Fundamentally different both in its causes and consequences was the third wave of Jewish immigration. It is generally designated as the Russian, because the majority of the immigrants of this class came from the Russian Empire, including Poland. It must, however, be added that this wave includes, as well, the large Jewish centers bordering on Russia, such as Galicia, Roumania, and, to a lesser ex-

tent, Hungary—in short, that part of Europe which, on account of its cultural status, was cleverly dubbed semi-Asia.

In spite of the slow and grinding pressure of economic misery and political discrimination, to which the Russian Jews had long been subjected, the Jewish immigration from Russia, with a few exceptions, started only after 1882, as an immediate result of the massacres, which have been often described, and of the anti-Jewish restrictions adopted by Czar Alexander III. When the immigration did come, it came, in contradistinction from the German-Jewish immigration, with the force of a volcanic eruption. It was also volcanic as regards its numbers, for, while the German-Jewish immigration affected but a part of German Jewry, which altogether amounts to half a million, the immigration from Russia and the adjoining countries drew on a population of no less than eight millions. The vastness and suddenness of this exodus determined to a large extent the fate of the new settlers, for they naturally drifted toward large centers, and in consequence, both the problem of Judaism and the problem of Jewish education assumed an essentially different and a far more complicated character.

Make-up of Russian Jews.—But much more even than by these external factors was the problem of Jewish education among these newcomers determined by their religious and cultural make-up, which was vastly different from that of the German Jews. The complete cultural and social isolation in which the Jews of Poland and Russia had lived for centuries continued practically undisturbed till very recently. The influence of the Mendelsohnian movement in Germany, which penetrated even into Russia, affected but a thin layer of Russian Jewry, and the far more extensive and far more radical disturbances in present-day Russian Jewry have not as yet asserted themselves sufficiently to affect seriously the problem of Jewish education in this country.

The strict isolation in which, owing to a variety of historic causes, the Jews of the Polish Kingdom had lived for centuries was even more accentuated when Poland came under the Russian régime, for by confining the Jews to the pale of settlement and excluding them from the villages the Russian Government drove them into congested towns and cities, in which they often formed the overwhelming majority of the population. They lived in complete segregation from their neighbors, and the non-Jews were as much of a puzzle to the Jews as the latter were to the non-Jews. The terrible economic and political misery to which the Russian Jews were condemned made them look upon the whole non-Jewish population as their natural enemies, which in reality they were; and in their despair they clung more fondly than ever to the soothing comfort and uplifting influ-

ence of Jewish life and doctrine. General secular education was at a low ebb in Russia; it was certainly far inferior both in extent and intensity to Jewish educational requirements. Yet even these meager educational advantages were withheld from the Jews; and when in a whim of despotic generosity, as it occasionally happened, the Russian Government decided to draw, or rather to drag, the Jews to secular education, it was suspected by them as an effort to land the Russian Jews in the fold of the Greek Orthodox Church. No wonder, therefore, that the Jews anxiously shunned all general education and lived their own life. They spoke their own language (Yiddish); they wore their own dress, and were in every manifestation of life Jews, and nothing but Jews.

The intellectual character of their religion.—The cap and corner stone of Russian Jewish life was religion—religion as taught by the Bible and interpreted and embodied in definite practices and institutions by post-biblical or rabbinical Judaism. To rabbinical Judaism, however, even more than to biblical Judaism, religion is inseparable from two fundamental aspects. It is, on the one hand, not merely a matter of faith, forming a set of abstract beliefs, but a complete system of living which embraces the most significant and the least significant functions in practical life. It is, on the other hand, a matter of knowledge and intellectual endeavor. Hence, practical piety and religious knowledge or scholarship formed and still form the Boaz and Jachin of old-fashioned Russian Jewish life. In this connection we are particularly interested in the second factor, and it may be said without exaggeration that at no time during the long duration of Jewish history and in no place throughout the world-wide extent of the Jewish Diaspora has this great intellectual ideal of rabbinical Judaism, which nearly 2,000 years ago crystallized itself in a comprehensive system of primary and secondary education, been so intensely developed and so completely realized as in Russian Jewish life.

To those who can not fall back upon their own personal experience it is difficult even remotely to convey the tremendous importance of this intellectual or educational factor among the Jews of Russia. Russian Jewry presented the unique spectacle of a community in which the social stratification was solely determined by knowledge or intellectual achievement, whose whole energy, unaffected by economic considerations and undiverted by the need of recreation or even solicitude for physical well-being, was so fiercely concentrated on the acquisition of knowledge for the sake of knowledge. The ideal type of Russian Jewish life was the Lamden, the scholar. The highest ambition of the Russian Jew was that his sons, and if he had only daughters, that his sons-in-law should be scholars, and the greatest achievement of a man's life was his ability to provide suffi-

ciently for them, so that, relieved from economic cares, they might devote themselves unrestrictedly to Jewish learning. As a well-known scholar thoughtfully puts it, among the Jews of Poland and Russia there was no learned estate, not because there were no scholars, but because the people itself was a nation of students.[1] To be sure, this learning was one-sided. Yet it was both wide and deep, for it embraced the almost boundless domains of religious Hebrew literature and involved the knowledge of one of the most complicated systems of law and profound theological doctrines. The knowledge of the Hebrew prayers and of the Five Books of Moses, which, as we have seen, was the objective of German Jewish education, would not have been sufficient to save the Russian Jew from the most terrible opprobrium—that of being an Am-Haaretz, an ignoramus. The ability to understand a Talmudic text, which demands years of preparation, was the minimum requirement for one who wanted to be of any consequence in the community.[2] It is obvious, therefore, that these religious ideals and educational standards of Russian Jewish life were bound to call forth a distinct set of educational institutions designed to preserve and advance these ideals and standards.

Educational agencies.—We shall now proceed to describe in brief the educational agencies of Russian Jewry, for the difficulty of the problem of American Jewish education largely consists in the fact that it is determined and hampered by these models. Before describing them, however, we wish to call attention to four general characteristics which attach to all of them and have left their impress upon the educational reproductions in this country.

First, general education being completely neglected, the Jewish religious education in Russia took, as far as time and attention are concerned, the place of general education. Second, Russian Jewish life being completely barred from a normal physical and economical development, these institutions paid no attention whatsoever to hygienic requirements or the demands of economic life. Third, on account of the marked individualism of the Russian Jew and the lack of organizing ability produced by the life in the ghetto, these educational institutions were never formed into a system, but remained almost entirely disconnected, individual undertakings. Fourth,

[1] Prof. L. Ginzberg, The Jewish Primary School (reprint from the Jewish Exponent, Philadelphia, 1907), p. 5.

[1] The educational standards of Russian Jewish life may perhaps be best illustrated by an anecdote which was told to the writer by a friend. The latter, a native of southern Russia, in which Jewish education is less developed, was traveling through Lithuania, which is, on the contrary, known for its high educational level. A Jewish coachman by whom this gentleman was driven was muttering something in Hebrew. On being asked whether he was reciting the Psalms (which are generally recited by the lower Jewish classes in Russia), the coachman indignantly retorted: "In your country they may be satisfied with knowing the Psalms; I am reciting the Mishnah!" The Mishnah is a code of law (civil, criminal, and ritual) upon which the Talmud is based. Imagine in any other country or nation a driver reciting by heart, let us say, the Justinian Code.

owing to a variety of historic causes, the Jewish woman was expected to limit herself to the religious life of the home and was almost entirely barred from the domain of Jewish religious knowledge.

The first and most important of educational factors in Russian Jewish life was, as it is and should be everywhere—the home. From the very dawn of its consciousness, the child was made familiar with the Jewish religious practices and taught to pronounce, or, more correctly, to prattle the short Hebrew prayers and benedictions which Judaism prescribes for drink and food and all occasions of life. Perhaps, more than by all descriptions this tendency may be illustrated by the fact that Russian Jewish legend admiringly narrates of some of its saints, that, while still being nursed (children in Russia used to be nursed very late), they were able to pronounce the Hebrew blessing over the milk which they drew from their mothers' breasts.

When the boy was 5 years old (sometimes even earlier) he was sent to the heder (a Hebrew word designating "room," in all probability originally the room in which the teacher lived). The heder, which is a very ancient Jewish institution, was, at least as far as Russia is concerned, not a communal institution, but a private school with a comparatively small number of children, ranging from 50 to as few as 4.

The heder may be subdivided into two kinds:

First, the elementary heder in which the following subjects were taught: Ivre, or Hebrew reading, for which the prayer book served as a textbook, and Humesh, or the Five Books of Moses (later with commentaries). Characteristically enough, the child began with the Third Book of Moses, dealing with the complicated system of Jewish sacrifices and laws.

Second, the advanced heder, in which the study of the Talmud (with only an occasional reading of the Bible) formed the main object of instruction. Jewish history, or even Biblical history, or the systematic teaching of religion and ethics was neglected, largely because the Talmudic literature, though in a disconnected manner, was thought to offer sufficient material for both.

The hygienic condition of the heder which consisted, as indicated by the name, of a single room in which the teacher lived, often with a large family, was harassing. The hours of study were inconceivably long, from 8 in the morning to 8 in the evening in the elementary heder, and from 7 in the morning to 9 or even 10 in the evening in the advanced heder. In the latter, in addition, a part or the whole of Thursday night was devoted to reviewing the ground covered during the week. There were neither examinations nor graduations nor prizes, such stimuli being unnecessary, because of the universal reverence for Jewish knowledge and its representatives.

The heder, in which the boy remained till about his fifteenth year.[1] was supplemented by two higher institutions of learning. First was the beth hamidrash (house of interpretation, or study), a curious institution which probably has no parallel in the life of any other nation. It was a building, such as was found even in the smallest Jewish community, which served not only as a house of prayer, but also as a sort of public library in which the Jewish residents spent daily a few hours of study and pious meditation and which was at the same time a place of recreation, such as recreation was in Russian Jewish life. Above all, it was a place in which the Russian Jewish youths, without any guidance and left completely to themselves, continued in literal fulfillment of the Biblical injunction (Joshua i, 8) to meditate in the Law day and night, for they often spent there their scanty hours of rest.

The other alternate institution of higher learning was the yeshibah or Talmudic academy. This type of institution, which was particularly prevalent in Lithuania, was generally founded by some famous rabbinical authority and was maintained, as were also its students who were counted by hundreds and even by thousands, by the generous donations of the whole community. There the Jewish youths, under some sort of systematic guidance, which, however, made full allowance for Russian Jewish individualism, explored no less assiduously the vast domains of Jewish lore.

Neither in the beth hamidrash nor in the yeshibah was there a definite system of promotion or graduation. Those who were particularly successful in their advanced studies received from some celebrated authority the rabbinical diploma, the most coveted distinction in Russian Jewish life, which, however, was by no means always put to practical use. Those who were less successful were satisfied to be educated laymen. From his status as a student, the Russian Jewish youth passed directly into the state of matrimony, at the age of 17 or 18, and without the slightest knowledge of life or business went to swell the mass of struggling humanity.

One more institution which in Russian Jewish life was least important, but when transferred to American soil became of unexpected significance, must be mentioned in this connection. The heder, as was pointed out above, was a private school, and the teacher who kept it depended on the tuition fee for his livelihood. For, poor as the Russian Jews were, they seldom considered themselves poor enough to forego the privilege of paying for the religious instruction of their children. "Though you have to secure the means by begging, be sure to provide for the instruction of your children in

[1] The age of attendance at the various Jewish schools differed somewhat in the different parts of Russia. The difference in this as well as in other points was greatest between Lithuania and Poland.

the Torah," is a dying father's admonition to his children.[1] But for those children who were fatherless, or whose parents could under no circumstances afford the tuition fee, every community maintained a public school called Talmud Torah (study of the law) in which the elements of Judaism were imparted. In spite of the fact, or perhaps owing to the fact, that these schools were under the supervision of the Jewish community, they were the least successful and least esteemed type of educational institution. Only the poorest of the poor and those that formed the very dregs of Russian Jewish society availed themselves of this educational agency.

The educational institutions, as outlined above, suffered no doubt from many serious, nay fundamental, defects and they have often been subjected, particularly by those who passed over to secular education, to violent and even passionate criticism. Yet, on cool reflection, one must admit that they were thoroughly successful, for they fulfilled the purpose for which they were created, which was to perpetuate the peculiar ideals of the Russian Jewish community. And much as we may feel inclined and, indeed, are forced to condemn them when applying modern standards, we must not overlook the great fact that, largely through their instrumentality, one of the most unfortunate sections of humanity, ground by indescribable poverty and crushed by the heavy hand of an unfriendly Government, has become and still remains one of the most intellectually alert and one of the most anxious, nay greedy, for the light of knowledge and intellectual advancement.

A world new in every manifestation.—No particular penetration or study is necessary to realize the terrible chaos in which the Russian Jewish immigrants found themselves when, on touching these hospitable shores, they were confronted by the completely different, nay diametrically opposite conditions of American life. The whole elaborate structure of Russian Jewish life seemed to tumble like a card house on the first touch with American reality. Everything in the new environment, the radically different standards and ideals of a highly industrialized community, the political freedom, the utterly different attitude of the neighboring population, the demands of general education which characteristically enough the Russian Jew immediately accepted as a matter of course, although in his native land he had shunned them, and at the top, and perhaps at the bottom of it all, the fierce economic struggle of the newcomers with the infinitely greater prospects of success which it held forth for them—all these circumstances were equally bound to revolutionize their time-honored ideas and ideals. America was to them, in the literal sense of the word, a new world, new not only geographically,

[1] Prof. L. Ginzberg, Jewish Primary School, p. 14.

but also economically, socially, politically, and religiously, new in every manifestation of life; and it is no exaggeration to say that in no other class of immigrants, not even among those from the Far East, has the painful process of adaptation assumed such tragic proportions as among the Russian Jews. For, having no land or Government to fall back upon, they come to this country with the intention to stay, and with the genuine desire to become part and parcel of this Republic. No wonder, therefore, that many of the immigrants, realizing the hopelessness of adapting Judaism (the Judaism such as they knew it) to the new environment, threw up their hands in despair and left the growing generation to their fate. The result was that within a few years there was created a gulf between parents and children which could no more be bridged, and which is undoubtedly the source of the innumerable tragedies in the inner life of the Russian Jews in this country.

There were others, however, who, with heavy hearts and hoping against hope, decided to make a stand for what they rightly considered to be their most sacred duty as Jews. But not knowing how to modify their old traditional standards in accordance with the new conditions, they proceeded to reproduce the religious and educational institutions of Russian Jewish life exactly in the same form which they had had in the "old country." This disastrous policy was, in part, encouraged by the attempts made by the earlier Jewish settlers, by the so-called German Jews, to Americanize the newcomers. Well-meant and prompted by generous motives as these attempts no doubt were, they probably did more harm than good. For, instead of trying to preserve all that was valuable in the mental make-up of the Russian Jew—and much of it was of high and lasting value, even in the new environment—and, instead of adapting it gently and cautiously to the new conditions, these attempts, rudely ignoring the peculiar individuality of the Russian Jew, proceeded to hammer it by force into the mould of American life. No wonder that they sometimes resulted in making the Russian Jew reject all that was valuable in his own culture and adopt that which was superficial and least valuable in the new culture. As a consequence, the Russian Jews as a whole learned to look askance at all these attempts at Americanization, much as they favored Americanization in itself, and they refused to accept even those modifications of Jewish life which might have proved beneficial for the preservation of Judaism in this country.

Transplanted agencies fail to thrive.—Left then to their own resources, the Russian Jewish immigrants endeavored to reproduce the religious, and what interests us here particularly, the educational agencies of Russian Jewish life. But, with all their loyalty to their traditions, it was obvious that a complete reproduction was impossible. The downfall of the central pillar that had supported the structure

of Russian Jewish life, the ideal of religious knowledge or scholarship, involved the downfall of all those institutions which had served it. Hence the beth hamidrash and the yeshibah were doomed from the beginning, and, though attempts at reproducing them have been made, they did not yield any tangible results. Even the advanced heder, which had for its purpose the difficult study of the Talmud, had no place in the new surroundings, in which the best energy of the growing generation was requisitioned either for general education or for the economic struggle. As a result only the elementary heder and the Talmud torah, the two institutions which limited themselves to imparting the fundamentals of Judaism came to the forefront, and these institutions became the more important, since, on account of the economic struggle and other causes, the Jewish home which had always been the power house of the Jewish religion lost much of its influence as an educational factor among the Jewish people.

We now understand the reason why the heder became, and indeed has remained, a favorite institution among the Russian Jewish immigrants. According to recent calculations there are about 1,000 heders in this country, with an annual budget of about $600,000; half of them are in New York City. Yet, no one, not even among the most optimistic or most orthodox, doubts that the heder is a complete failure in this country. Its inherent defects, which in the atmosphere of Russian Jewish life were already noticeable but bearable, are a terrible anomaly in the new environment. The long hours of study which were an indispensable condition of their success in Russia are impossible in this country in which the public school claims the best time and energy of the child. The unhygienic and even repulsive external condition of the heder, which was scarcely felt in Russia, has had the inevitable result to make the instruction imparted in it repulsive to the American child, who judges it by the standards of the public school. From these facts alone, not to speak of other numerous causes, it is obvious and is indeed admitted on all hands that the heder has no chance whatsoever and does not even offer the possibility of improvement.

An unexpected development was in store for the last type of Russian Jewish educational agencies—the Talmud torah. This institution which occupied the lowest rung in the educational ladder is gradually climbing to the top. The success of the Talmud torah is mainly due to the fact that it is a large school and as such is better fitted to cope with the large numbers in the congested Jewish centers, and is at least potentially able to adopt and adapt the methods and externalities of the American public school. The first Talmud torah in New York City was founded in the early eighties, but with all its potentialities this type of school has not yet fully worked out. The Talmud torah in this country was originally designed, as had

been the case in Russia, to accommodate the poor children who can not pay, and it has not yet fully emancipated itself from this objectionable character as a charitable institution. Demanding, as they do, a large budget, which can only be obtained by organized effort, they are far from meeting the educational situation, not to speak of the numerous internal evils to which reference will be made later. It is enough to point out the dry fact that of the 200,000 Jewish school children at present in New York, only 11,000 are taught in Talmud torahs.

After what was said of the position of woman in Jewish education in Russia it will scarcely be necessary to add that until very recently practically no provision was made for the religious instruction of the girls, although it is conceded by all that in this country the Jewish woman is destined to play an important rôle in Jewish religious life.

JEWISH EDUCATION NOW A COMPLICATED PROBLEM.

The above facts clearly show that, in spite of all educational endeavors, which in view of the extraordinary difficulties confronting them rather deserve our praise than our criticism, the problem of Jewish education which has been enormously complicated by the third and largest Jewish immigration to America is further from its solution than it had ever been before. A few figures will illustrate the magnitude of the problem. The last census of Jewish institutions was made in 1908, and was presented in the "American Jewish Year Book" for that year. Analyzing the data bearing on Jewish education, Dr. S. Benderly, of whom more will be said hereafter, arrived at the following figures which, of course, will have to be modified according to the steady increase in the numbers of the Jewish population.[1] Counting the Jewish population of the United States as 1,800,000, he estimated at 360,000 the number of Jewish school children in 1908. Of these, 26,560 received instruction in 235 Sunday schools with one session weekly; 9,551 were taught in 92 congregational schools with two, very seldom three, sessions weekly; and 26,216 attended 236 daily schools (Talmud torahs). The number of boys taught in heders (for which no data were available), including those who received private instruction at home, was computed roughly by Dr. Benderly to be 40,000. The total number of children, then, who in 1908 received Jewish religious instruction, amounted altogether to about 100,000; so that fully 260,000, among them probably 170,000 girls, were left without any religious instruction whatsoever. Taking into consideration that none of these types of schools admittedly came up to the educational standards, even as

[1] See his article "Jewish Education in America," in the Jewish Exponent (Philadelphia), January 17 1908.

modified in this country, the terrible significance of these figures from the religious point of view becomes apparent.

But not only from the religious point of view. The lack of all religious instruction and consequently of all religious idealism, the inevitable weakening of moral self-restraint which threatens to result from it, the terrible cleavage between parents and children, and the consequent loss of parental authority which has thus been brought about, the materialization of Jewish life, which is in crying contrast to all Jewish traditions and is particularly dangerous in an environment with a highly developed industrial life, all these facts, added to the natural solicitude for the preservation of Judaism, could not fail to arrest the attention of all those who were seriously interested in the welfare of the Jewish community in America.

Numerous symptoms heralded this awakening of American Jews to one of the prime necessities of Jewish life. For the first time, in several large cities systematic endeavors were made to collect educational statistics as the first step to cope with the problem. A number of new Talmud torahs were established. At the graduation exercises of the Jewish Theological Seminary in 1905, its president, Prof. Solomon Shechter, emphasized the fact that, while several higher institutions of learning had been provided for the education of the few (for one out of one thousand), no adequate provision was made for the nine hundred and ninety-nine remaining; and the same point was dwelt upon on the same occasion by Dr. Cyrus Adler. Shortly afterwards, through the munificence of Mr. Jacob H. Schiff, the Teachers' Institute of the Jewish Theological Seminary, and a similar institution, under the auspices of the Hebrew Union College in Cincinnati, were established. In New York City the various Talmud torahs, among which there had been no cooperation whatsoever, made an attempt, though it remained a platonic one, to organize a central board of Talmud torahs.

DIFFICULTIES PECULIAR TO NEW YORK CITY.

It goes without saying that difficult and extensive as the problem of Jewish education was throughout the country, it was nowhere more difficult and more extensive than in New York City. For New York City contains almost a half of American Jewry and forms the port of entry where the immigrant comes face to face with the conditions of the new environment. The Jewry of New York, indeed, presents, on account of its vast and congested population, unique problems of religious organization. The religious and educational chaos which, as was indicated above, was the inevitable result of a chaotic immigration, was greater here than elsewhere. It was, therefore, natural that the first attempt to cope with this situation should be made in New York. In 1909 a large number of Jewish organiza-

tions formed the Jewish community (Kehillah) of New York City for the purpose of religious organization, under the chairmanship of Dr. J. L. Magnes. It is a significant fact that one of the very first steps of the new organization was to investigate the status of religious education in New York City. Already at the first convention of the community (February 26 and 27, 1910) Prof. Mordecai M. Kaplan, the then chairman of the committee on education, presented a report of this investigation, which made a deep impression. He showed that, out of a computed Jewish school population of 170,000 (in 1909), only 41,404 were taught in some kind of Jewish educational institution—of these almost a third (13,532) went to heders—while, even if we make allowance for those taught privately at home, two-thirds were left without a knowledge of Judaism and its religious institutions. Prof. Kaplan summed up his report in the following discouraging sentences:

1. The demand for Jewish education is comparatively small.[1] 2. Small as the demand is, the means and equipment which we possess at present are far too inadequate to meet it. 3. Wherever that demand is met, there is a lack of system or of content.

MEANS FOR IMPROVEMENT.

Fortunately this educational inquiry aroused more than fruitless apprehensions. At the same convention of the Jewish community the chairman, Dr. J. L. Magnes, was able to announce that Mr. Jacob H. Schiff had donated the sum of $50,000 to be distributed over five years for the purpose of improving and promoting Jewish religious primary education in New York City; and soon afterwards a sum of $25,000 was added by the New York Foundation[2] for the same purpose.

Having obtained these gifts, Dr. Magnes addressed himself to Dr. S. Benderly, a Jewish pedagogue in Baltimore, for an expression of opinion as to the best use of these funds.

The inquiry of Dr. Magnes was answered by Dr. Benderly in a statement which subsequently appeared as Bulletin No. I of the Jewish Community of New York City. Since the ideas contained in this statement became afterwards the guiding principles of the Jewish Bureau of Education, the following sentences may be quoted as illustrating the attitude of this organization toward the problem from the very beginning:

Never before in Jewish history has so large a Jewish community as we form in this country had both the opportunity and the responsibility of proving that the essentials of Judaism, so far from being in contradiction to the

[1] This is no doubt explained by the fact that the Jewish population had no confidence in the hitherto established educational institutions.

[2] The New York Foundation is made up of a legacy of the late Mr. Heinsheimer for educational and social purposes.

cardinal elements of modern civilization, are complementary to them, the two sides being mutually indispensable to each other. Constituting an integral part of the Republic, we are under obligation to demonstrate that the principles for which Israel fought and bled over two thousand years are perfectly compatible with and essential to the fundamental principles upon which the American nation is building a wonderful structure of human liberty and happiness. Our obligation is twofold. On the one hand, we must Americanize, in the higher sense, every Jew in this country, infusing into him the spirit of self-reliance, fair play, and social cooperation; and, on the other hand, we must build up the structure of Jewish life, so as not only to enable ourselves to hold our own, Jewishly speaking, but also to become an indispensable element in the progress of the country.

As the great public school system is the rock bottom upon which this country is rearing its institutions, so we Jews must evolve here a system of Jewish education that shall be complementary to and harmonious with the public system.

Speaking of the practical difficulties of the problem, Dr. Benderly continues:

First looms up what I would call the hygienic phase of Jewish religious education. We have to deal with children that spend practically the entire day in the public schools, and come to the Hebrew school fatigued both in body and mind. This is the fact that has given birth to the Jewish Sunday school, and now the more serious students and well-wishers of the Sunday school system realize that, because of the limited time at its disposal, it has no future. On the other hand, the Talmud torahs and chadarim [heders] confine weary children for two hours or more daily, which is undoubtedly detrimental to the health of the children; and the Jews living in congested areas, in New York in particular, can ill afford to invite a curtailing of vitality. The question at once arises: Is it possible to work out a course of religious instruction that shall enable us to reduce the number of hours needed for Hebrew instruction by half, and that shall at the same time be exhilarating enough to evoke a response from tired children?

Discussing the financial phase of the problem, Dr. Benderly pointed out [1] that to provide school buildings for the Jewish school population of New York would demand an investment of $16,000,000, an annual expenditure of $3,000,000 for teaching, an army of 3,000 teachers, not to speak of the annual increase of 8,000 children, who would demand an additional annual investment in school buildings of $640,000, an additional annual outlay of $120,000 for teaching, and an additional annual supply of 200 teachers. The mere magnitude of this phase of the educational problem makes it clear that our hope lies with the people themselves, and that the parents must support the schools. Dr. Benderly, therefore, suggested that the fund placed at the disposal of the Jewish community should not be spent in propping up certain existing institutions, but should be used as a lever for the study and improvement of primary Jewish education in New

[1] The figures in the following are slightly amended in accordance with later computations. See the writer's report on the Bureau of Education submitted to the third annual convention of the Jewish community of New York City (New York, 1912), p. 24.

York City as a whole. He proposed the establishment of a bureau for Jewish education having the following objects:

1. To study the Jewish educational forces in New York City with a view to cooperation and the elimination of waste and overlapping.
2. To get in touch with the best teachers and workers and to organize them for their material and spiritual advancement.
3. To carry on a propaganda in order to acquaint the Jews of New York with the problem of Jewish education and with the means of solving it.
4. To operate one or two model schools for elementary pupils for the purpose of working out in practice the various phases of primary Jewish education.

THE JEWISH BUREAU OF EDUCATION.

The plan formulated by Dr. Benderly was submitted, through Dr. Magnes, to the executive committee of the Jewish community of New York City, which adopted it and elected a board of five trustees to take charge of the new organization for a period of five years. The trustees, in turn, appointed Dr. Benderly director. The bureau was formally opened October 1, 1910.

From what was said and quoted in the foregoing, the general tendency of the bureau will have become clear. With the limited sum at its disposal and the enormous problem before it, the bureau realized from the very beginning that it could not cope singlehanded with it and could not even dream of filling the enormous void which had been created in Jewish education. Its primary function was to reawaken the inherent love of Judaism and Jewish education which had been so typical of old-fashioned Jewish life, and after calling forth the dormant energies of the community to direct and to systematize them. It also saw the necessity of making wise and cautious use of the educational factors already in existence, as far as they were sound and offered possibilities of improvement, and altogether to seek the sympathy and cooperation of the community. This policy of the bureau, which consciously placed itself at the service of the whole Jewry of New York, also determined its attitude toward the religious and other numerous questions which must naturally divide a community of such vast magnitude and such heterogeneous composition. While planting itself firmly on the broad basis of the perpetuation of Judaism, without which the bureau, as indeed all Jewish education, would have no reason for existence, it concentrated its attention on the pedagogic and financial improvement of Jewish education and decided to leave to the various schools and elements with which cooperation might be established the working out of their own particular religious or other policies.

The first step of the bureau was to get into personal touch with the Jewish educational agencies in New York City. In examining the various types of these institutions the bureau soon realized that the

heder offered no possibility of improvement and that the task to adapt it to the new environment was hopeless. It therefore, without any attempt at reform or criticism, quietly abandoned it to its fate. The congregational schools, including the Sunday schools, did not lend themselves as the first objects of systematization, owing to their dependence upon their congregational organizations and the unavoidable congregational policies. An important educational factor was represented in New York City by the so-called "institutional schools," the most important among them being the Religious School of the Educational Alliance, an institution for the improvement of immigrants, with an enrollment of 2,000 pupils, and that of the Hebrew Orphan Asylum, with an enrollment of 1,200, both institutions pursuing broader educational purposes. These schools could not form the prop of an educational system, as they were only the adjuncts of separate and entirely distinct institutions.

THE TALMUD TORAHS SELECTED FOR PERPETUATION.

The attention of the bureau was gradually drawn toward the Talmud torahs, which, with all their inherent defects, offered the best available means for the systematization of Jewish education. Again, of the 24 Talmud torahs which were found in New York, the majority were by their number of pupils and their external conditions more in the nature of a heder, and shared with it most of its defects. Hence, in casting about for the building material for the future structure of Jewish education, the attention of the bureau was riveted on the large Talmud torahs.

The most striking defect of these institutions, considered as a class, was their lack of uniformity. Every Talmud torah was an independent institution and pursued its own methods, or lack of methods, without the slightest regard to the efforts of its sister institutions. In view of the constant shifting of the Jewish population in New York, their lack of uniformity was fatal, as very few children stayed throughout the entire course in one Talmud torah, and, when moving to a different section, even if they were fortunate enough to find there another Talmud torah, they had to start all over again. A central board of Talmud torahs had indeed been formed, but, hampered by the complete lack of means and without authority, it accomplished nothing. At the suggestion and with the constant cooperation of the bureau, the principals of the largest Talmud torahs came together for the first time, and in a long series of conferences elaborated a uniform curriculum. The results of these conferences, which were the first attempt at systematic cooperation in the field of Jewish education, were subsequently published by the bureau.[1]

[1] A brief survey of 31 conferences held by Talmud torah principals in New York City, New York, 1912.

THE PLAN OF THE CURRICULUM.

Of the numerous resolutions passed by the principals, the following may be of more general interest. The aim of Jewish education was formulated to be "the preservation of the Jews as a distinct people, existing and developing in the spirit of the Jewish religion." The plan of parochial Jewish schools was rejected, on the ground that it was undesirable for the Jews from the civic point of view and was surrounded by insurmountable practical difficulties.

The curriculum of the Talmud torahs was planned to extend over seven years and to pursue the following subjects:

A sufficient knowledge of Hebrew, which should enable the children to understand the prayers, the Pentateuch, the historical portions of the Bible, selections from the Prophets and Hagiographa, selections from the Mishnah, the easier Midrashim [religious homiletic works], some portions of the Talmud, and some specimens of mediæval Jewish poetry; Jewish history, ancient and modern, and an acquaintance with Jewish religious observances.

It can be seen at a glance that this curriculum stands midway between the high and, in this country, unapproachable standards of Jewish education in Russia, on the one hand, and the meager requirements of the Jewish Sunday school on the other.[1]

Greater emphasis than before was laid on the hygienic phase of the problem, which was particularly difficult owing to the supplementary character of Jewish education, and a number of improvements were suggested to make Jewish instruction more wholesome and attractive to the children taxed by the public school. Definite requirements were laid down for the Jewish teachers, and in many other respects an agreement was reached for a united course of action.

But it soon became apparent that the plan thus worked out would remain without practical effect as long as there was no external pressure or inducement which would make the principals and directors of the institutions comply with the standards formulated. As a matter of fact, the precarious financial condition of the Talmud torahs made in many cases a compliance with these standards impossible. Thus, to mention but one factor, the average pay of the

[1] It may be of interest to add here a few further details of the curriculum as worked out in the series of textbooks prepared by the bureau for the Talmud torahs and schools with a similar program. The curriculum, which extends over seven years (between the ages of 7 and 14), is divided into three parts. Part I (first and second year) is merely of a preparatory nature. The aim is to give the children a sufficient knowledge of Hebrew to take up the Bible in the original; to acquaint them with the stories of Jewish heroes and to teach them the simple prayers and Jewish melodies. Part II (third, fourth, and fifth year) is mainly devoted to the study of the Bible in the original, the rest of the time being given to the study of the prayers. Part III (sixth and seventh year) deals mainly with post-biblical literature and history. During the last five years the curriculum is supplemented by a course of collateral reading which is correlated with the lessons in the classroom. The material for the collateral reading is bound with the textbooks. The whole ground is divided into 2,800 recitations of 30 minutes each (400 recitations, or 200 hours per year). The school year consists of 40 weeks; so that the curriculum calls for 5 hours a week, besides children's Sabbath service (one hour).

Talmud torah teachers, many of whom were married and had large families, was found to be $38.33 per month. They were, in consequence, forced to look out for an additional livelihood, which paralyzed their pedagogic usefulness. It was obvious, then, that no satisfactory curriculum could be adopted and carried out as long as the financial status of the Talmud torah was not placed on a sounder basis. Hence the bureau very soon turned its attention in this direction.

FINANCIAL COOPERATION.

The financial survey subsequently made by the bureau[1] brought out, among others, the following interesting facts: In the 24 Talmud torahs existing in New York City 10,710 children were taught. The eight largest, with an enrollment of 7,050 pupils, spent a little over $100,000 per annum. This sum is derived from various sources, the most important being regular membership dues yielding 23.9 per cent of the income, occasional donations amounting to 15.6 per cent, and tuition fees from the less poor children to the extent of 28.4 per cent. On analyzing these figures it was found that, although the Talmud torahs had originally been charity schools and were designed as such even when transferred to this country, the largest part of that burden was carried by the poor. Of the 6,641 members, whose dues amounted to $27,059, fully 4,963 paid only from $1 to $3 per annum, and the low financial condition of these contributors may be gauged from the fact that no less than 4,507 of this number paid their dues in small, often weekly, installments. Only 61 paid between $11 and $25, and not more than 13 contributed over $25 annually. The peculiar character of this source of income had also other disadvantages. Thus the cost of collecting the membership dues was as high as 20 per cent, while the collection of the tuition fees, which was made by the teachers in the school through the medium of the children, had a demoralizing effect on both pupils and teachers and on the instruction. In one of the Talmud torahs it has been calculated that the amount of time involved in this peculiar method of collection represented a larger financial loss than the sum collected. Thus it was found that practically all the Talmud torahs were in a struggling financial condition, which made their existence precarious and their progress impossible.

It needed no penetration to realize that, in order to remedy the pedagogic evils of the Talmud torahs, it was necessary first to remedy their financial shortcomings. This, however, could only be accomplished by means of a fund to be applied to purposes of standardization.

[1] A survey of the financial status of the Jewish religious schools of New York City, with full data of the eight largest Talmud torahs (New York, 1911).

The need of such a fund had already forced itself upon the attention of the bureau as a result of its other activities. The bureau, in consequence, proposed the collection of an education fund, which, beginning with $50,000, should within 10 years rise to $300,000 per annum. It was obvious that this money could only come from the better situated classes. Dr. Magnes, the chairman of the community, took the matter in hand and met with rapid success. For the first time in American-Jewish history was such a fund started in such a fashion, and the result showed that the Jewish community needed only to be awakened to the importance of the educational problem before it. The bureau was now able to enter upon a more permanent form of cooperation with the Talmud torahs.

The per capita cost of Jewish teaching had been found to be $15 per annum. Accordingly, the pupils of the Talmud torahs were divided into three groups: Those that paid the full tuition fee ($1.25 per month) and were no drain on the financial resources of the school, those who paid half (65 cents per month), and those who could pay nothing. The last-named class represented the crux of the problem, and the bureau, therefore, undertook to shoulder the burden by paying the tuition for these free pupils, provided they did not exceed, as they ought not to, a third of the entire school population of a given school. In this way, the bureau hoped to combat the deep-seated prejudice against the Talmud torahs as charity institutions; and by bringing the poor and better-off children together, to infuse into the schools the democratic spirit of the public school.

PROVISIONS FOR STANDARDIZATION.

In return for its assistance the bureau, with a view to the attainment of greater efficiency and uniformity, imposed the following conditions: 1. The pupils are to be investigated by the bureau in their homes, to determine the financial group to which they belong. 2. The tuition fee is to be collected by the bureau in the homes of the children in monthly installments and the objectionable methods of collection hitherto practiced are to be discontinued. 3. The curriculum above referred to, which shortly before had been worked out by the principals, is to be adopted uniformly in all the schools, provision being made for future necessary modifications, in accordance with a definite method of procedure. 4. No teacher shall be employed by the Talmud torahs unless he obtain a temporary certificate from the board of license instituted by the bureau, this temporary certificate to be exchanged for a permanent license at the end of three years. 5. The initial salary of the teachers to be $60 per month ($720 per annum), and to rise gradually within a period of four years to $80 per month ($960 per annum).

It has already been pointed out that from the very beginning the Bureau of Education centered its attention on the larger schools, which in its opinion were best adapted to the conditions of this country, and particularly of New York City. The same point of view guided the bureau in its application of the new fund. It was forced to disregard the cry of assistance which came from the smaller schools whose financial condition was distressing, but hopeless. Three prerequisites were fixed for its grant of financial aid: A minimum school enrollment of 500, a separate building, and a stable organization.

At present all the educational institutions in New York City considered by the bureau to be fit for standardization are affiliated with it. In addition, a number of schools outside of New York cooperate with the bureau in various ways, and a still larger number in different parts of the country profit by its advice and experience.

RESULTS ACHIEVED.

The results of this activity were not slow to show themselves. The success of the endeavor of the bureau to change the status of Talmud torahs from charity schools to self-supporting institutions may be gauged from the following facts: Six of these institutions with which the bureau cooperates collected $20,107.01 in tuition fees during the scholastic year 1910–11, prior to the advent of the bureau. The same institutions, in which the number of children has increased only 2 per cent, have collected $35,962.80 through the medium of the bureau during the present scholastic year (1912–13), an increase of 79 per cent. The new method of collecting the tuition fees in the homes of the children has had no less substantial spiritual advantages, for not only has it put a stop to the obnoxious methods formerly in vogue, but the monthly collection in the homes carried on by a carefully selected corps of college men has also offered an excellent medium of educational propaganda among the Jews of New York.

In this connection it may also be mentioned that, in addition to its department of collection, the bureau has worked out a complete truancy system, which carefully follows up the attendance of the children in the schools cooperating with it and endeavors to locate and reduce the sources of the enormous leakage from which these institutions formerly suffered. The investigators employed for this purpose are distinct from the collectors, but they likewise serve as an effective medium of educational propaganda by keeping the parents in touch with the schools attended by their children. The greater interest and sympathy which are to be observed recently in the field of Jewish education are, at least in New York, due largely to these endeavors of the bureau.

The pedagogic results of this policy of the bureau can not, of course, be put down in figures, but they are no less substantial. There is a tendency toward cooperation and mutual helpfulness among the various educational factors which was formerly lacking. The status, and with it the self-respect and the efficiency, of the teachers has been considerably raised, and this new spirit of hopefulness and enthusiasm must naturally exert a beneficent effect upon all the phases of educational endeavor.

Of course, encouraging as these results undoubtedly are, they have succeeded in affecting the status of the Talmud torahs qualitatively but not quantitively. Only a little over 5 per cent of the Jewish school population of New York has thus far found accommodation in this type of school. The necessity of a vast number of additional Talmud torahs is obvious. But the Jewish community seems to be awake to this need, and the bureau has worked out a plan which will tend not only to stimulate, but also to organize the efforts of the community in this direction.

"PREPARATORY SCHOOLS."

One of the aims formulated in the program of the bureau was to create, in addition to the standardization of existing institutions, a few model schools in which the various phases of the problem, as affecting New York City, were to be elaborated, and to place the results of these experiments at the disposal of all other schools. Three such schools, to which the name of "preparatory school" was given, have been established by the bureau, with an enrollment of 1,200 children. Owing to the fact that the girls were practically barred from the Talmud torahs and from a number of other schools and that Jewish female education had been sorely neglected, the bureau has gradually limited these schools to girls. In addition to their serving as places of observation and practice, the preparatory schools, as will be pointed out later, were also designed with a view to helping in the solution of the difficult problem of Jewish teachers. The pupils of these institutions were selected, with this purpose in mind, from the higher grades in public schools, and in this selection the bureau was fortunate enough to benefit by the sympathetic cooperation of the public-school system. The program of these schools was practically placed on the same level as that of the Talmud torahs—an unheard-of innovation in Jewish education, which had hitherto paid little or no attention to girls—except that on account of the more advanced age of the children (from 12 to 16) they are expected to cover the ground in almost half the time.

One of the conspicuous features of these schools is the distribution of the hours of instruction by utilizing not only Sunday, but also Saturday, when the children are free from public school. The six

hours of weekly instruction are equally divided over Saturday, Sunday, and one week-day afternoon. This arrangement avoids one of the most serious drawbacks of Jewish education, the conflict with the public school, and by utilizing for the first time the Jewish Sabbath, restores to it its old traditional character as a day of religious study and meditation. This arrangement is also of vital importance from a financial point of view, for it enables the teacher to handle four classes in the same classroom in rotation, and thus to take charge of about 100 children. Moreover, a considerable saving is effected by the greater use of the classrooms thus made possible. Finally, this arrangement is important for the solution of the teachers' problem, for it gives the Jewish teacher sufficient scope to make Jewish instruction his profession and life work.

TEXTBOOKS AND METHODS.

A regular curriculum is impossible without textbooks. Yet, strange as it seems, Jewish education until very recently was without them. The prayer book, the Bible, and the Talmud, exactly in the same form in which they were used by the adults, were placed before the children. At an age when the modern child still depends on primers the Jewish boy was made familiar with the theological conceptions of the prophets or the subtleties of civil and even marital law as contained in the Talmud. In recent years, however, owing to certain tendencies in Jewish life, a marked change has taken place which has resulted in the production of a vast number of textbooks, particularly in Russia. But being the outcome of individual endeavor, they are disconnected and offer no graded or systematic series. Moreover, having been written abroad and designed for vastly different conditions, practically none of these books fits in completely with the requirements as they have arisen in this country. An additional difficulty, which is by no means insignificant, is found in the fact that the make-up of these books is far below the American standards of book production to which the child is accustomed in the public school. Hence the need of a graded, well-printed, properly bound, and adequately illustrated series of textbooks, which should adapt itself to the limited time at the disposal of the child and keep pace with its mental progress in the general school, was early formulated by the bureau. The projected textbook series, which is to cover a curriculum of seven years, is to consist of 28 books for the pupils, accompanied by a corresponding number of guides for the teachers. The former are so arranged that each book is to be covered in three months; the latter contain supplementary material, bibliography, suggestions, and model lessons. Particular attention is given to the appearance of the books. It may be mentioned as a detail that every year is marked by a separate color of the binding.

The work in this direction has progressed systematically, until now (October, 1913) the bureau has worked out the textbooks for the first three years of the curriculum.

It would lead us too far to dwell on a number of other experiments of the bureau in the field of textbook and general juvenile literature, but one aspect of this work may be of interest to the general reader.

The most important, and at the same time the most difficult, subject of instruction in a Jewish school is the Hebrew language. The overwhelming majority of Jews look upon Hebrew as inseparable from the Jewish religion. It is the language in which the prayers are recited and the Bible is read weekly in the synagogues, not to speak of the immeasurable post-Biblical literature to which Hebrew alone can provide the key. It is not a spoken language, the vernacular of the majority of Jews being the Yiddish dialect; neither is it a dead language. For, apart from its primary function as a religious medium, it has been, and in Russia still is, the language of culture and literature; it is vastly used as a medium of correspondence, and has produced in the past century a considerable secular literature and press. The intensiveness of Jewish education in Russia brought it about that, although studied like every ancient language by the translation method (translating the Hebrew original into Yiddish, a method still followed in the heders in this country), it is widely understood in the various functions referred to.

In recent times, under the influence of Zionism, the Hebrew language, which had ceased to be spoken nearly 2,000 years ago, has been restored as a vernacular in Palestine. In consequence the attempt was made to teach Hebrew by the so-called natural or Berlitz method, generally designated by Jewish pedagogues as Ibrith be-Ibrith (Hebrew in Hebrew). This method has been largely followed by modern pedagogues in Russia, and in some cases in this country. At the conferences of the principals of the Talmud torahs mentioned above, the natural method was elaborately discussed and finally adopted, not only on its general pedagogic merits but also on the ground that, by obviating the terribly fatiguing mechanical reading and translating of Hebrew and by arousing the interest of the child by means of concrete objects and actions, it was particularly applicable to this country, where the Jewish school can count only on the leavings of the children's time and energy. This method is now used in all the schools affiliated with the bureau and forms the basis of its textbooks. There is naturally no intention whatsoever to make Hebrew a spoken language in this country—such a task would be impossible and, if possible, scarcely desirable—but the natural method is preferred on the ground that it lightens and considerably shortens the difficult road to the understanding of Hebrew as the

medium of the Jewish religion. The results of the method are carefully watched and will ultimately determine the question of method in Jewish education.

THE PROBLEM OF TEACHERS.

No phase of Jewish education is more complicated and more serious than the problem of teachers. The root of the evil goes back to the old-fashioned system of Jewish education in Russia, in which elementary teaching, in spite of the boundless passion of the Jews for higher Jewish learning, had no status. Instead of being a profession with definite training and standards, it was, as formerly in other countries and among other nations, merely a makeshift resorted to by those who had proved failures in other walks of life. This evil, which was minimized by the general religious enthusiasm of Russian Jewish life, has been considerably accentuated in this country. What makes this problem particularly complicated is the fact that Jewish education in America imperatively demands the combination of a thorough English and pedagogic training with an adequate knowledge of Hebrew and love of Judaism, a combination which can not be expected from an immigrant population. Furthermore, the higher economic standards in this country offer young men almost everywhere better prospects of material success. The demand for Jewish teachers is very considerable. In New York alone it amounts to 3,000, with an annual increase of 200; and against this demand there is only one training school, the Teacher's Institute of the Jewish Theological Seminary, with an enrollment of about 200. While in the Sunday schools, with their simplified standards and their comparative neglect of Hebrew, Jewish teaching can still depend on volunteers or on Jewish public school teachers who treat it as a side issue, the instruction of the more intensive type, such as is demanded (at least in theory) by the bulk of the Jews, needs the preparation and aptitude of a full-fledged calling. Hence the problem arose of making Jewish teaching a profession sufficiently remunerative, both morally and financially, to attract the capable and ambitious.

It is a vast problem which can scarcely be handled and still less solved by a single organization. The bureau, however, took the initiative, indicating the direction in which a solution is to be sought. As a first step it insisted on raising considerably the salary of the teachers. Prompted by the same motive, it established a board of license so as to create definite standards for Jewish teachers, which had hitherto been missing, and to keep off the unworthy and incapable. More important was the task to locate and to increase the sources of supply. The bureau found two types of Jewish teachers, the immigrant young man, whose only equipment was a thorough Jewish education, and the American or Americanized college man,

whose Hebrew knowledge was inadequate. The bureau endeavored to work the problem at both ends. For the former type courses in English and pedagogy were instituted; for the latter, classes in Hebrew and pedagogy were established as a preparation for the teachers' institute, where they will receive a more systematic training. It would be an enormous gain for Jewish education if it could systematically draw on the large number of Jewish college graduates who often enter professions already overcrowded and who might be attracted to Jewish teaching if given adequate preparation and encouragement.

With all this, the Bureau of Education early realized that the Jewish teacher problem, as the teacher problem in general, could not be solved without drawing largely on the female element. While considerably represented on the staffs of the Sunday schools, the female teacher is practically barred from the traditional type of school. For to the Jews, who are still dominated by Russian Jewish associations, the idea of a woman as a teacher of Judaism seems preposterous. But a gradual change is taking place, and there is no doubt that the near future will produce a large demand for female teachers, particularly in the schools for girls and in the lower grades of the boys' schools. This aspect of the problem had already been a determining factor in the establishment of the preparatory schools referred to above. While serving primarily as places of observation and practice, these schools were so designed as to enable the pupils, at least the best and ablest, to pursue an additional course of study in a training school.

More recently an experiment in this direction was made on a larger scale. To spread Jewish female education and to increase the number of Jewish female teachers, about 500 girls between the ages of 14 and 18, attending the high schools of Greater New York, have been carefully selected with regard to both their physical and their mental fitness and are given an intensive course of study in Jewish subjects, with a view to prepare them more efficiently for the technical training they are to receive afterwards.

Of course, the solution of the problem could only be indicated by the bureau. Its ultimate solution will have to come from the training schools with a vastly increased capacity and perfected organization.

EXTENSION TEACHING.

The reader who may recollect the figures of the number of Jewish children receiving Jewish instruction in New York City will easily realize that, in spite of all efforts, a great number of children for many years to come will be unable to receive a regular Jewish school education. Here, to a certain extent, lies the gravity of the

problem, for it is this unschooled generation which runs the risk not only of drifting away from Judaism, but also of becoming a prey to the destructive influences of a cosmopolitan street life. To provide school buildings for the nearly 150,000 children still barred from Jewish schools would alone cost some $10,000,000, not to speak of the cost of teaching and maintenance. While, therefore, systematic instruction was out of the question, the bureau has been conducting experiments to teach these children in a less comprehensive manner the essentials of Judaism. The bureau has been maintaining three such centers in large halls in which the children were gathered on Sunday mornings for this form of religious lessons. The instruction was given by means of slides, which by an ingenious combination of type and color were designed to acquaint the children with the most important Hebrew responses in the synagogue service. Biblical history was taught in a similar fashion. The extension work is still in the stage of experiment, but it has no doubt large inherent possibilities.

CONCLUSION.

We have limited ourselves in this sketch to the more important aspects of the work of the bureau. But they will suffice to show the general trend of its policies and activities. The problem of Jewish education will undoubtedly appear insignificant when judged by the huge proportions of the general problem of American education. Yet it will appear less so, when judged by its own standards as vitally affecting a definite section of the population. Similarly, the endeavor on the part of the Jewish community to solve the problem, inadequate as it is, will be more justly appreciated when it is considered that it is merely grafted upon the admittedly keen pursuit of the Jews after general education. As far as the work of the bureau is concerned, its difficulty lay in the fact that, in coping with the problem, it could not fall back on any precedents or models. It was pioneer work, and, like every other pioneer work, had to overcome skepticism, hostility, and indifference. The bureau has been in existence for only three years and is only at the very beginning, but it feels that the beginning has been made in the right direction. It is now ready to venture upon larger fields. While until recently it was primarily occupied with the type of education demanded by the bulk of New York Jewry, which consists largely of immigrants, the bureau is now ready to turn its attention also to the other types of school created by the earlier settlers. For the bureau, looking toward the future, can not desire to preserve the existing distinctions among Jews, which are a product of the past, and is anxious to help in the perfection and perpetuation of the only type possible in this country, that of the American Jew. Again, while originally restricted to New York City, the influence

of the bureau, in the absence of similar educational agencies, is felt and will be felt more and more in other Jewish centers. Only very recently the bureau has made an attempt, with encouraging results, to come into personal contact with a considerable number of outside communities, as far west as Kansas City, in which the problem of Jewish education, though smaller in extent, is no less serious than in New York. The road before the bureau is clear. Its pace will be determined by the assistance and encouragement given to it by the Jewish community.

In conclusion, it may be said that, while as a Jewish institution the bureau is primarily interested in Judaism and in its future and progress, it may claim at the same time to serve the broader interests of the community at large. For it can not be indifferent to this community, whether its Jewish population, by preserving and cherishing the great traditions of its past, shall add a distinct contribution to the spiritual treasury of the American Nation, or whether, by losing its identity, it shall merely become a colorless and hence valueless addition to the number of its inhabitants.

CHAPTER XVII.

PROGRESS AND CONDITION OF LUTHERAN PAROCHIAL SCHOOLS DURING THE CURRENT YEAR.

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The progress of the Lutheran parochial schools during the year 1912–13 has been normal, and no change has occurred to alter their condition in any essential point.

The fundamental ideas that enter into a definition of the Lutheran parochial school were expressed two generations ago by Prof. Lindermann, who was at that time principal of the largest Lutheran teachers' seminary in the United States (at Addison, Ill.). He helped to educate hundreds of Lutheran parochial school-teachers, and his book "Amerikanisch-Lutherische Schulpraxis" is still the standard book on pedagogy in the Lutheran Missouri Synod, which conducts 2,216 out of a total of 5,883 Lutheran parochial schools in the United States and Canada. He says on page 3 of the second edition of his book:

> An Evangelical Lutheran congregational school is formed by the voluntary agreement and resolution of a Lutheran parish, or local church organization, to gather its children of a prescribed age in a locality, properly fitted up for the purpose, to the end of having them thoroughly instructed, within certain prescribed hours, by a common teacher, chiefly and primarily, in the wholesome doctrine of the Divine Word according to the Lutheran Confessions, and to advance them in true godliness; next, to give them instruction and training, as far as practicable, in such knowledge and accomplishments as are necesssary for all men in their civil status.

This definition has become somewhat cumbersome, because the author, struggling to embrace every necessary feature in one statement, had to resort to the involved sentence. The definition, however, being genetic and descriptive, is quite serviceable for conveying a correct idea of what, in the judgment of Lutherans, constitutes a parochial school. Nothing has occurred during the current year that would necessitate a revision of this definition.

The Lutheran parochial school, wherever it exists in our country, is still regarded as a voluntary enterprise of a Lutheran congregation. The favorite name applied to this school by the church bodies which chiefly foster it in the United States is "congregational school" (Ger-

man, "Gemeindeschule": Norwegian, "Menigheds skole"; Swedish, "Församlings skola"). There is no constraint practiced in the erection and maintenance of these Lutheran congregational schools outside of that which the personal religious convictions of the members of a Lutheran congregation exercise on them individually. The origin of the schools, in nearly every case, is as follows: The members of a congregation vote to establish a congregational school, agree to send their children to it, appoint a teacher or teachers, and assess themselves for the support of the school. In some cases congregational schools have been organized, not by the entire congregation, but by a "school society" within the congregation. There have also been instances where several congregations have united in maintaining a parochial school, or certain grades of it. Thus, e. g., the Lutheran congregations of Oakland, Cal., and vicinity have combined their school interests and provide for the teaching of the lower grades in each of the cooperating congregations, while the higher grades are taught at a school that is centrally located. The Lutheran congregations of Milwaukee some time ago began to discuss a plan by which the entire city was to be divided into Lutheran school districts, regardless of parish boundaries, and a school for the teaching of the lower grades was to be provided in each school district, while the higher grades were to be taught in centrally located schools commanding a wider territory. The plan has not yet been put into practice. In some of the larger Lutheran communities another plan is being considered, viz, to induce the various congregations in the community to unite in the erection of Lutheran high schools, to be conducted either in connection with the leading Lutheran school of the community or as a separate cooperative enterprise of the various congregations. These efforts also are voluntary in the sense indicated above.

The means for maintaining the congregational school used to be and in many instances still are secured by tuition fees, payable monthly as a rule. This fee may be graded according to the class or grade which the child enters. The tuition fees, usually very low, have hardly ever sufficed to defray the expenses of the school, and the deficit is made up by the members of the congregation through voluntary contributions. There is a growing tendency, however, to abolish all tuition fees and conduct the congregational school as a "free school." During the present year this tendency has continued to strongly assert itself. The cost of maintaining a congregational free school is borne by all members of the congregation alike, whether they send children to the school or not. The congregational school is open also to children whose parents are not members of the congregation. Such children, even where the school is a free school, may be required to pay a tuition fee, at the discretion of the congregation or its officers.

The members of a Lutheran congregation conducting a congregational school are expected to send their children to that school in preference to any other school; or if for sufficient reasons they do not do so, to provide for the religious instruction of their children in a private way. It is granted by all Lutherans that the Lutheran congregational school does not exist by divine right, but is a human device to meet an acknowledged need of the church. As such, however, it is declared the best means to the proposed end that has yet been discovered. Instances have occurred—none during the current year—where attendance at the congregational school was made compulsory upon children of members, but such attempts have always been abandoned after a short time. Moral suasion is the only recognized method for dealing with indifferent members to induce them to send their children to the congregational school. The same method is employed to secure the means for the maintenance of the school. Interest in the congregational school is kept alive by special sermons, usually preached about the time of the opening of the schools in fall, by papers on the subject which are read before teachers' and pastors' conferences, and by articles in the official organs of the church. The present year has witnessed a strong literary campaign in behalf of congregational schools among the Norwegians. An epochal event in the history of congregational school enterprise is the erection, at a cost of over $200,000, of a new teachers' seminary at River Forest, Ill., by the German Missouri Synod. The dedication and opening of this institution is set for October 12, 1913.

The Lutheran congregational schools are popularly known as "German schools," or "Swedish schools," or "Norwegian schools," etc. It is plain from the definition cited above that the use of the German language—and this applies with equal force to the Norwegian, Swedish, Finnish, or any other foreign language—is not considered essential, while the teaching of the Lutheran faith is. As a matter of fact, there have been, and still are. Lutheran congregational schools in which the English language is the sole medium of instruction. True, these English congregational schools are proportionately few in number. But even in German schools English is the language used by teachers and pupils in nine-tenths of the studies pursued. In fact, the German language is used only in teaching German reading, grammar, and composition, and Bible history and Luther's Small Catechism. Even in religious study, which really forms the raison d'etre of these schools, the use of English as the medium of instruction is increasing, as the German (or Norwegian, Swedish, etc.) congregations are becoming English. So-called "parallel catechisms," e. g., have been prepared which contain the German (or other) text and its English equivalent on

opposite pages, and thus facilitate the understanding of the catechism by children who are better versed in the vernacular of the country than in the native tongue of their parents.

The statement at the head of this article, viz, that the progress of the Lutheran parochial schools in the country during the year 1912–13 has been normal, takes into consideration the working of certain natural causes which have always operated in the direction of retarding that progress. As long as Lutheran immigrants still speak their native language at their homes and in their churches, they naturally have a stronger interest in a school which teaches that language to their children. Their interest in the parochial school frequently wanes when they begin to limit or discard the use of their native language in their domestic and churchly relations. Sunday schools, which provide only religious instruction, Saturday schools, or afternoon schools, which provide for religious instruction and instruction in the mother tongue of the children's parents, are then usually substituted for the regular congregational school.

Another cause that sometimes cuts down attendance at Lutheran congregational schools is the double tax that Lutherans pay for school purposes: First, the tax levied by the State; and, second, the amount with which they have to assess themselves for the support of their own congregational school. A movement was begun within the German Missouri Synod two years ago to attempt to amend the school-tax laws so as to make it possible for Lutheran taxpayers to divert the amount, or a part of the amount, which they pay into the State treasury to their own schools. The plan is still under discussion. The manifest purpose of this plan is to relieve Lutheran taxpayers.

Lastly, the general retrogression of the birth rate throughout the country has begun to affect the numerical strength of Lutheran congregational schools. Upon the whole it can be said, however, that the Lutheran Church of our country still cherishes the congregational school. Applying the motto, "Our fathers' faith in our children's language," the Lutherans who have heretofore maintained congregational schools are making strenuous efforts to take these schools over into their English future, as they are gradually moving away from their German, Norwegian, or Swedish past.

At an exhibit of the work of the various schools in the city of St. Louis, in 1912, a pamphlet inscribed "Why Lutheran schools?" was distributed to visitors. For several reasons this pamphlet is valuable to the historian and the sociologist. It shows that the old definition of the Lutheran congregational school, which we cited near the head of this article, has not been lost sight of in two generations; it exhibits well the spirit that is back of the Lutheran congregational schools; it sets forth the cardinal feature of these schools which was

emphasized in the definition of Prof. Lindemann; and there is in this pamphlet a fine apologetic spirit, which reveals the determination of Lutherans to repel an attack upon their congregational schools by raising the charge that they are an un-American and unpatriotic institution. The pamphlet says:

Many people, misunderstanding the policy of the Lutherans in this direction, consider it an unnecessary expenditure of money. They notice that the Lutherans, too, are annually paying high taxes for the maintenance of the public schools, and yet they make little or no use of them, but rather erect their own schoolhouses and support their own educators. Why is this? Is it because of stubborn opposition and hostility to the public-school system? No. The Lutherans are not enemies of the public school; no American citizen can be an enemy of the common schools. They are a necessity. Without them our Republic would be in great danger of losing its capability for self-government, and the lapse into ignorance and barbarism would be only a question of time. The public schools are an important factor for good, rendering splendid assistance toward the perpetuation of our governmental institutions, the advancement of national life, and the progress of society.

Or is it perhaps the propagation of the German language that accounts for the existence of these schools? Not exactly; the study of German is, however, emphasized, because this language up to the present time affords the best medium in order to reach the Lutherans, who are largely German, in a religious way. There is indeed a far weightier reason that induces Lutherans to support their own schools. The parochial school system is based on the principle that religion is the most important object of human interest and concern. And true religion has a special application to children. They are endowed with immortal souls and created for eternity. It is of the highest importance, therefore, that they be given a thorough and complete religious training. Children with immortal souls must not be educated for this world only, but especially and principally for eternity. In view of this, they must be daily and diligently instructed in the saving truths of Christianity. That is the foremost aim of the Lutheran parish schools. In these schools the fear of God, which is the beginning of wisdom, is daily imparted to the children. The Lutherans believe that every education making any claim to completeness must include religious training; that education without religion is like a ship without a compass. A mere moral training will not suffice them. Moral education, dealing with the theories of right and wrong, considers personal conduct in its effects upon the welfare of self and others, whether good or evil. But moral teaching, apart from religion, is like a tree separated from its roots. The moral education, therefore, must be founded on and issue out of a religious training, because the latter supplies the only real basis for true morality. Religious instruction is the only safe and solid foundation of an education, because it trains the child to know when its behavior is beneficial or harmful to himself and his neighbor. The public schools do not and can not offer a religious education. Indeed, they must be kept from all religious influence and be entirely independent of it. The Government of our country should do all in its power to inculcate and promote a high standard of civic righteousness, but the subject of Christian righteousness is clearly outside of its sphere and beyond its ability. Because of the peculiar religious complexion of our people, the State can not be commissioned with the religious instruction of our youth. As loyal citizens of our country we must keep church and state distinctly separate. Thomas Jefferson, in a letter to the Danbury Baptist Association, wrote: "Believing with you that religion is a matter

which lies solely between man and his God; that he owes account to none other for his faith or his worship; that the legislative powers of government reach actions only, not opinions, I contemplate with sovereign reverence that act of the whole American people which declared that their legislature should 'make no laws respecting an establishment of religion or prohibiting the free exercise thereof,' thus building a wall of separation between church and state." The principle of American democracy as here declared guarantees all its citizens religious liberty and the separation of church and state. Since it is impossible to bring any kind of religious training into our public schools under a common head (because of the peculiar religious characteristics of the various church denominations), it is the solemn duty of the home and the church to provide for the religious training necessary for our youth. This, then, is the true situation: The public-school system must not meddle with religion in any form. It is the exclusive duty of the church to teach religion. This conviction has impelled Lutherans to establish their own school system and support it with their own money, without any financial support of the State. The Lutherans believe and know that if they succeed in making their children true citizens of the kingdom of Christ, they will at the same time have made them good citizens of the United States. Daniel Webster said in his famous Plymouth oration: "Whatever makes men good Christians makes them also good citizens." Gladstone often said: "Try to make good, conscientious Christians out of your children, and Great Britain will be well satisfied with them as citizens." Patrick Henry said in his last will and testament: "I have now disposed of all my worldly property to my family. There is one more thing I wish I could give them, and that is the Christian religion. If they had this and I had not given them a shilling, they would be rich; but if they have not the Christian religion and I had given them all the world, they would be poor." Lutherans want their children to live happily in Christian homes, to be and remain faithful members of their church, and to be the best American citizens, who can be trusted in every walk of life because they fear and love God. The Lutheran schools are therefore not a menace but a blessing to the liberty of our country.

The Lutheran congregational schools, as defined by Prof. Lindemann, are religious day schools conducted on the five customary school days of the week. The majority of the Lutheran congregational schools now in operation in the United States are conducted as regular day schools; but in mission parishes, sometimes embracing many miles of territory and thinly populated, or in congregations which for one reason or another have never installed a parochial school in their church work, the children of a congregation may be taught on four, three, two, or even one day of the week only, in the last case usually on Saturday. There are even schools of this kind to which the children come only for certain hours each week, and for the purpose of receiving religious instruction only, or this and instruction in reading and writing the mother tongue of their parents. It is necessary to note this fact, because these schools, though few in number compared with the rest, are still regarded as congregational schools, distinct from the Sunday school, and are numbered in the statistical tables which the various Lutheran church bodies publish from time to time.

The Lutheran congregational school, wherever it is fully constituted in all its branches of study, embraces both secular and religious studies. The former class of studies engross the greater portion of the schooltime of each day. Religious studies are confined to the first hour in the morning. The rest of the day is devoted to the studies which are pursued at our public schools, and to the study of the language of the children's parents, if these are immigrants from foreign countries. The larger Lutheran synods publish their own textbooks, prepared by their own pedagogues. In arithmetic, geography, and United States history the textbooks in use in the public schools of the States have been adopted in many instances. Many of the pupils of Lutheran congregational schools, after completing their courses at these schools, enter the eighth grade of the public grammar schools, or even the high schools.

The teachers at Lutheran congregational schools are mostly males, though nearly 500 females are employed as teachers. With few exceptions the teachers are college-bred men, or have had a special course of training at a normal school or teachers' seminary. At the beginning of 1913 the following schools which train teachers for congregational schools were reported in operation: Evangelical Lutheran Normal School, at Woodville, Ohio (Ohio Synod), with 5 teachers and 65 students; Evangelical Lutheran Teachers' Seminary, at Addison, Ill., now at River Forest, Ill. (operated by the Missouri Synod), with 10 teachers and 172 students; Immanuel Lutheran Normal, at Greensboro, N. C. (colored; operated by the Synodical Conference), with 3 teachers and 3 students; Lutheran Normal School, at Sioux Falls, S. Dak. (Norwegian Synod), with 9 teachers and 203 students; Lutheran Normal School, at Madison, Minn. (United Norwegian Church), with 7 teachers and 150 students; Lutheran Teachers' Seminary, at Seward, Nebr. (Missouri Synod), with 8 teachers and 123 students; Wartburg Teachers' Seminary, at Waverly, Iowa (Iowa Synod), with 7 teachers and 117 students. There are, however, many students preparing for parochial school work at the many Lutheran colleges, academies, and theological seminaries of the country.

In small and poor congregations the pastor often assumes charge of the school if he can arrange his other work in the parish so as to permit him to do so. There are probably 2,000 Lutheran pastors in our country engaged in congregational school work. But the aim of Lutheran congregations that have become firmly wedded to the principles outlined before is to obtain a special teacher for their children, though the teacher is frequently aided in his work by the pastor. Larger congregations grade their schools and appoint two, three, four, and even as many as eight teachers.

The school buildings are governed by the same natural laws that govern the appointment of teachers. There are instances in which the church building serves also as a school. As a rule, however, there is a separate school building, and some of the Lutheran congregational schools of the country are well-appointed modern structures, affording every convenience found in the best schools of the land. St. Paul Lutheran congregation of Fort Wayne has a school under construction now which will cost about $75,000.

It remains now to exhibit the progress and condition of the Lutheran congregational school statistically. The figures available for this purpose are deficient in a few cases, and we have refrained from substituting an arbitrary figure gained by estimating the probable progress or condition. From all the larger bodies statistics are at hand up to, and in one case inclusive of, the year 1912. The figures for 1913 will not be published until March, 1914, and later. A few of the smaller synods have not since 1911 published in accessible form the statistics of their school work.

Beginning with the poorest showing, there are still portions of the Lutheran Church of our country where the congregational school is unknown or of rare occurrence. The United Synod in the South, a federation of smaller Lutheran synods that was effected in 1886, did not report any parochial schools at the beginning of the present year. This body is entirely English and numbers among its constituent parts some of the oldest Lutheran synods in the country, such as the North Carolina synod, founded in 1820; the South Carolina synod, founded in 1824; the Virginia synod, founded in 1829; the synod of southwest Virginia, founded in 1842; the Mississippi synod, founded in 1855; the Georgia synod, founded in 1860; and the Holston synod (operating in eastern Tennessee), founded in 1861. The official names of these synods sufficiently indicate the territories to which their labors are confined. They are the Southeastern States, south of Pennsylvania and Maryland and east of the Mississippi River. The synods above named reported at the beginning of the current year a baptized membership of 69,196 souls and a confirmed or communicant membership of 50,354 persons above the age of 15 years.

In another large federation of synods, the General Synod, founded in 1820, the parochial school is likewise an almost unknown institution. Only the German Wartburg Synod, founded in 1876, and affiliated with this body, reports 30 parochial schools, with 500 pupils and only 2 teachers. It is not stated how many pastors serve as teachers. The General Synod is overwhelmingly English. It has its strongest representation in the Eastern and Central States, but extends its operations into the Western States, even as far as the Pacific coast. It embraces, besides the one synod already named,

the Maryland synod, founded in 1820; the West Pennsylvania synod, founded in 1825; the East Ohio synod, founded in 1836; the Allegheny synod and the East Pennsylvania synods, both founded in 1842; the Miami synod, founded in 1844; the Pittsburgh synod, founded in 1845; the Wittenberg synod, founded in 1847; the Olive Branch synod, founded in 1848; the Northern Illinois synod, founded in 1850; the Central Pennsylvania synod, founded in 1853; the Iowa synod and the Northern Indiana synod, both founded in 1855; the Central Illinois and the Susquehanna synods, both founded in 1867; the Kansas synod, founded in 1868; the Nebraska synod, founded in 1873; the California synod, the Rocky Mountain synod, and the Nebraska German synod, all founded in 1891; the Southern Illinois synod, founded in 1901, and the New York synod, the latest addition since 1908. There is, then, a large contingent of Lutherans, with representation in a majority of the States in the Union, that does not conduct congregational schools. This body reported at the beginning of 1913 a baptized membership of 405,939 and a communicant membership of 307,679.

The third large federation of Lutheran synods, the General Council, founded in 1867, was at the beginning of the current year composed of 13 synods. Of these, 6 reported no parochial schools, viz, the Pittsburgh synod, founded in 1843; the District synod of Ohio, founded in 1857; the Chicago synod, founded in 1871; the English synod of the northwest, founded in 1891; and the Nova Scotia synod, founded in 1903. The last-named synod, and the Central Canada synod, founded in 1909, operate outside the United States. The seven synods in this body which reported congregational schools were: The Ministerium of Pennsylvania, the oldest Lutheran body in the United States, founded in 1748, which reported 36 schools, with 75 teachers and 2,170 pupils; the Ministerium of New York, the second oldest Lutheran society in the Union, founded in 1773, which reported 84 schools, with 45 teachers and 3,471 pupils; the Swedish Augustana synod, founded in 1860, which is credited with 444 schools, 594 teachers, and 18,602 pupils; the Pacific synod, founded in 1901, reporting 2 schools, 2 teachers, and 35 pupils; and the synod of New York and New England, founded in 1902, which reports 3 schools, 19 teachers, and 143 pupils. Two synods reporting parochial schools and affiliated with this body operate outside the United States, namely, the Lutheran synod of Canada, founded in 1861, with 34 schools, 21 teachers, and 954 pupils, and the Manitoba synod, founded in 1897, with 20 schools and 781 teachers. The General Council is largely an English body, operating in the Eastern, Northern, and Northwestern States, and in the Canadian Provinces. The larger representation, proportionately, of the parochial school in this body is due partly to the Swedes and partly to the fact that the two

oldest synods have maintained parochial schools probably from the time that those synods were organized. The sum total of congregational schools in the General Council at the beginning of the current year was 623, with 756 teachers and 26,136 pupils. Deducting the schools located outside of the United States we obtain for this body 579 schools, 735 teachers, and 24,421 pupils. The baptized membership of this body at the same date was 751,373, and the communicant membership 495,468.

There are in the United States 14 independent Lutheran synods—i. e., synods which are not federated with any of the general bodies already named and yet to be named. Two of these report no parochial schools, viz, the Norwegian synod, founded in 1853, and the Icelandic synod, founded in 1885. As regards the former of these it is known to the writer that, notwithstanding the negative report, it zealously fosters the congregational school, and even conducts a seminary for the training of parochial school-teachers. The baptized membership of this body at the beginning of the current year was 154,017, and the communicant membership 94,751. It is estimated by others that there are in this synod nearly 200 parochial schools. This synod is represented in nearly all parts of the United States from New York to California and from Minnesota to Texas. This synod also carries on work in the northwestern Provinces of Canada. The Icelandic synod is represented in the United States only in the States of North Dakota and Minnesota. Its work is done chiefly in the Canadian Provinces of Manitoba, Saskatchewan, and Alberta. Its baptized membership is 5,112, and its communicant membership 3,454.

Of the remaining 12 independent Lutheran synods the Ohio synod, founded in 1818, and operating in most of the States of the Union and in Canada and Australia, is credited with 265 schools, 116 teachers, and 9,354 pupils. This synod numbers 191,460 baptized or 131,923 communicant members.

The Buffalo synod, founded in 1845, and consisting of a small number of isolated congregations in New York, Michigan, Ohio, and Canada, reports 20 schools and 7 teachers. The baptized membership of this body is 8,600, the communicant membership 5,200.

The Norwegian Eielson synod, founded in 1846, and consisting of only six congregations in Minnesota, Iowa, Wisconsin, and North Dakota, reports 6 schools and 4 teachers. This synod numbers 1,500 baptized or 1,100 communicant members.

Hauge's Norwegian synod, founded in 1846, and operating in 11 Central States, reports 181 parochial schools, and 6,000 pupils. Its membership is given at 50,000 baptized, or 36,200 communicant members.

The German Texas synod, founded in 1851, and operating in central Texas, reports 12 schools, 12 teachers, and 250 pupils. It numbers 6,000 baptized or 4,500 communicant members.

The German Iowa synod, founded in 1854, has most of its congregations in 14 Central, 3 Western States, and a few in Canada. It is credited with 731 parochial schools, 36 teachers, and 11,910 pupils. Its baptized membership is 183,121, its communicant membership 112,830.

The Danish Lutheran Church, a synod founded in 1871 and having a scattered membership all over the United States, reports 84 schools, 96 teachers, and 2,498 pupils. Its membership is 20,519 baptized and 13,098 communicant members.

The German Immanuel Synod, founded in 1886 and operating in the Eastern and Middle States, is credited with 7 schools, 7 teachers, and 160 pupils. It numbers 5,027 baptized, or 3,390 communicant members.

The Finnish Suomi Synod, founded in 1890, is represented in Michigan, Minnesota, Massachusetts, Illinois, Ohio, and Pennsylvania. It reports 47 schools, 52 teachers, 2,537 pupils, and has a membership of 27,460 baptized, or 13,660 communicant members.

The United Norwegian Church, a synod founded in 1890 and operating in the United States and in western Canada, reports 1,000 schools, 987 teachers, and 50,584 pupils. Its membership is 275,970 baptized and 169,710 communicant members.

The United Danish Church, founded in 1896 and represented in the United States and Canada, reports 111 schools and 5,000 pupils. Its membership is 19,610 baptized and 10,823 communicant members.

The Norwegian Lutheran Free Church, founded in 1897 and operating in Minnesota, North Dakota, South Dakota, Wisconsin, Michigan, Illinois, Iowa, Washington, Oregon, and Canada, reports 118 schools, 210 teachers, and 9,575 pupils, with a membership of 39,000 baptized and 18,500 communicant members.

In all these independent synods the sum total of congregational schools, inclusive of any located in Canada, is 2,644, of teachers 1,524,[1] and of pupils 97,868.

Ninety Lutheran pastors in the United States, who are without synodical connection and serve approximately 205 congregations with a baptized membership of 50,000, or a communicant membership of 27,500, report no parochial schools.

The best showing for parochial schools is made by a federation of synods overwhelmingly German, which bears the official name of the Synodical Conference of North America. It was founded in 1872 and consists of six synods. Excepting the larger bodies among the

[1] The pastors serve as teachers in many instances.

independent synods named above, the Lutheran parochial school may be said to be in the most flourishing condition in the Synodical Conference. Here, too, more elaborate statistics are available than elsewhere.

The Missouri synod, founded in 1847 and represented in nearly every State of the Union, in Canada, Brazil, and Argentina, reports 2,216 schools, with a teaching force of 1,069 male and 252 female teachers and 1,166 pastors teaching in these schools. The number of pupils was 94,167, in a baptized membership of 934,199, and a communicant membership of 565,129.

The Wisconsin synod, founded in 1850, and operating in Wisconsin, Michigan, Washington, Illinois, and Alabama, reports 290 schools, 118 teachers, and 32,825 pupils. It numbers 185,311 baptized and 165,821 communicant members.

The Minnesota synod, founded in 1860, and represented in Minnesota, North and South Dakota, and Wisconsin, reports 155 schools, 26 teachers, and 15,940 pupils, in a baptized membership of 92,185, and a communicant membership of 46,213.

The District Synod of Michigan, founded in 1895, and represented in Michigan, Ohio, and Wisconsin, reports 75 schools, 7 teachers, and 2,933 pupils. It numbers 21,224 baptized and 15,211 communicant members.

The District Synod of Nebraska, founded in 1904, and represented in Nebraska and South Dakota, reports 25 schools, 4 teachers, and 995 pupils. Its baptized membership is 17,202, and its communicant membership 10,978.

The Lutheran Slovak synod, founded in 1902, and represented in Pennsylvania, Ohio, Illinois, New York, New Jersey, Connecticut, and Wisconsin, reports 25 schools and 1,530 pupils in a baptized membership of 19,275 and a communicant membership of 13,631.

For the entire Synodical Conference the sum total of schools is 2,786; of teachers, 1,476; of pupils, 148,390.

The grand total for the Lutheran Church in the United States is 5,883 schools, 3,758 teachers, and 272,914 pupils. The baptized membership of the Lutheran Church in the United States is given at 3,533,410, and the communicant membership at 2,317,177. Deducting the communicant from the baptized membership we obtain 1,216,023, which is approximately the number of Lutheran children from infancy to the age of 14 or 15, when they leave the congregational school. Accordingly, the 272,914 pupils of the Lutheran congregational school represent 22.44 per cent of the child population of the Lutheran Church; or, in other words, out of 100 Lutheran children, 22 attend a parochial school, or for every 22 children that go to school there are 78, including infants and children up to the age of 6, that do not go to a parochial school.

The same average for the Synodical Conference is 32.79, for the General Council 12.2, and for the independent synods 25.04 per cent.

Statistics of Lutheran parochial schools.

Synods.	Date of foundation.	Baptized membership.	Communicant membership.	Number of schools.	Number of teachers.[1]	Number of pupils.
United synod of the South	1886	69,196	50,354	.....	.....	.....
General synod	1820	405,939	307,939	30	2	500
General council	1867	751,373	495,468	579	735	24,421
Independent synods:						
Norwegian synod	1853	154,017	94,751	[2] 200	.....	.....
Icelandic synod	1885	5,112	3,454	.....	.....	.....
Ohio synod	1818	191,460	131,923	265	116	9,354
Buffalo synod	1845	8,600	5,200	20	7	.....
Norwegian Eielson synod	1846	1,500	1,100	6	4	.....
Hauge's Norwegian synod	1846	50,000	36,200	181	.....	6,000
German Texas synod	1851	6,000	4,500	12	12	250
German Iowa synod	1854	183,121	112,830	731	36	11,910
Danish Lutheran Church	1871	20,519	13,098	84	96	2,498
German Immanuel synod	1886	5,027	3,390	7	7	160
Finnish Suomi synod	1890	27,460	13,660	47	52	2,537
United Norwegian Church	1890	275,970	169,710	1,000	987	50,584
United Danish Church	1896	19,610	10,823	111	.....	5,000
Norwegian Lutheran Free Church	1897	39,000	18,500	118	210	9,575
Synodical Conference of North America:						
Missouri synod	1847	934,199	565,129	2,216	[3] 1,321	94,167
Wisconsin synod	1850	185,311	165,821	290	118	32,825
Minnesota synod	1860	92,185	46,213	155	26	15,940
District synod of Michigan	1895	21,224	15,211	75	7	2,933
District synod of Nebraska	1904	17,202	10,978	25	4	995
Lutheran Slovak synod	1902	19,275	13,631	25	.....	1,530

[1] Pastors serve as teachers in many instances.
[2] Estimate.
[3] 1,166 pastors teach.

CHAPTER XVIII.

THE SCHOOLS OF THE MORMON CHURCH.

By Osborne J. P. Widtsoe,

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Contents.—Early history—Administration and revenues—School buildings and furniture—Grades of schools—Attendance—Teachers.

EARLY HISTORY.

The school system of the Mormon Church began with the establishment of the church at Fayette, N. Y., on the 6th day of April, 1830. Among the earliest utterances of the founder, Joseph Smith, were declarations that the glory of God is intelligence; that men can not be saved in ignorance; that a man can be saved no faster than he gains knowledge; and that "whatever principles of intelligence we attain unto in this life, it will rise with us in the resurrection; and if a person gains more knowledge and intelligence in this life through his diligence and obedience than another, he will have so much the advantage in the world to come." In June, 1831, a committee was appointed to select and to prepare textbooks for use in church schools. A so-called "elders" school was organized in 1832. In 1833, 1834, and 1835 Mormon schools were maintained at Kirtland, Ohio, and at Independence, Mo. Besides, there are mentioned in the early history of the Mormon Church a Hebrew school, a singing school, and the School of the Prophets. On December 16, 1840, the Mormon leader with his followers, then located in the remodeled and rechristened town of Nauvoo, on the banks of the Mississippi, was granted a charter to "establish and organize an institution of learning within the limits of the city [of Nauvoo] for the teaching of the arts, sciences, and learned professions, to be called the University of the City of Nauvoo." Unfortunately, however, there remains little reliable information concerning these early ventures in the field of education.

What may be termed the second period in the history of education in the Mormon Church begins with the settlement of the Mormon pioneers in the Territory of Utah, and led to the establishment of the public-school system. The pioneers entered the valley of the Great Salt Lake July 22, 1847. The first school in Utah was opened only three months later, in October, 1847. The first schoolhouse in Utah consisted of an old military tent, "shaped," we are told, "like an

ordinary Indian wigwam." The first school-teacher in Utah was Mary Jane Dilworth, a worthy Quakeress who had joined the Mormon Church early in the forties. Miss Dilworth conducted a school for the smaller children. When the rigorous winter weather stopped the outdoor work of the men, Julian Moses opened a school for the older children. Before Christmas time of the pioneer year there were thus two schools in active operation in the newly founded Great Salt Lake City. On November 27, 1850, three years after the Mormon pioneers had settled in Utah, the Deseret Evening News contained the following correspondence:

> Common schools were beginning in all parts of the city for the winter; and plans for the construction of schoolhouses in every ward were being made, with a view for a general system of schoolhouses throughout the city. One plan had already been submitted, which comprised three large schoolrooms, a large hall for lecturing, a private study, reading room, and library.

In the same year (1850) was founded in Salt Lake City the first university west of the Missouri River, the University of Deseret, now the University of Utah. It is needless to follow further this period of Mormon education. The early population of Utah was wholly Mormon; these early schools were founded by the Mormons in their desire for knowledge and were maintained by them. In time, however, the many schools, elementary and advanced, that followed the humble beginning made by Miss Dilworth were officially recognized by the Legislative Assembly of the Territory of Utah, and have since grown into the very efficient public-school system of the State of Utah.

The third period in the history of education in the Mormon Church has evolved the system of schools now in operation in the church. This system includes schools conducted in the United States of America, in Canada, in Mexico, in New Zealand, on the Pacific islands, and in various missions of the church throughout the world. It will be proper, however, to mention briefly here only those conducted in the United States of America. On October 16, 1875, 25 years after the incorporation of the University of Deseret, President Brigham Young founded in Provo, Utah, the Brigham Young Academy. Two years later he established in Logan, Utah, the Brigham Young College. Both of these schools grew out of President Young's conviction that the day school should teach the heart and the hand, as well as the head. Religion had been excluded from the curricula of the public schools. The instruction then given in the schools was mainly theoretical. There seemed to be need, therefore, for a new system of schools in which religious and industrial training might be given. The deeds of trust to these schools provided that "students who take a full course shall be taught, if their physical ability will permit, some branch of mechanism that shall be suitable

to their taste and capacity." This was the beginning of industrial education in Utah. It was further declared that it should be the purpose of the church schools to—

> make of the students and graduates worthy citizens and true followers of Jesus Christ, by fitting them for some useful pursuit, by strengthening in their minds a pure attachment to the Constitution of the United States, and to our republican institutions by teaching them the lessons of purity, morality, and upright conduct.

The church schools at Provo and Logan proved of such great worth to the people that during the next 10 to 20 years a system of schools developed. Academies, or high schools, were established in the larger and more populous divisions of the church, and seminaries, or elementary schools, in the larger and wealthier wards. By 1890 the church schools had become so numerous and the school work so extensive that Dr. Karl G. Maeser, who had been principal of the Brigham Young Academy since its establishment, was appointed general superintendent of church schools. Under his direction and supervision the church schools grew in importance and efficiency.

ADMINISTRATION AND REVENUES.

For the advancement of its educational interests, the Mormon Church has developed a splendidly organized system. First, to superintend and control the educational policy of the church there is a general church board of education. The authority of this board extends in matters educational throughout the entire church. Secondly, as the immediate agent of the general board and supervisor of the schools there is a general superintendent. Thirdly, to consider all matters pertaining to courses of study and to certification of teachers there is a board of examiners consisting of the general superintendent and the principals of the largest three schools. Finally, each school has its own board of trustees to supervise all matters purely local.

The revenues of the church school system are derived almost wholly from the tithes voluntarily paid by the members of the church. During the school year 1911–12 the Mormon Church expended for the maintenance of its American schools alone $405,180. For 1912–13 the expenditure amounted to $410,634.

SCHOOL BUILDINGS AND FURNITURE.

The Mormon Church maintains in the United States of America 20 schools of secondary and college grade. Each one of these schools has an educational plant and equipment fully adequate to care for the community in which it is located. In some cases the school buildings have cost upward of $100,000 each. The financial report for 1911-12 shows that in that year the value of American school

buildings and real estate owned by the church was $1,512,589, while the value of furniture was $176,432. For 1912–13 the land and building value is $1,525,579, while the furniture value is $205,992.

GRADES OF SCHOOLS.

The seminaries, or elementary schools, begun in the late seventies and the eighties, were discontinued after a few years. This was for two reasons. First, it was found to be too expensive an undertaking to educate the great number of children of elementary school age. Secondly, the public schools had themselves been very much improved, and, moreover, they had been made free. In the United States, therefore, the Mormon Church concluded to maintain schools of secondary and higher grade only. There is at present a school located at Provo, Utah, the Church Teachers' College of the Brigham Young University. The Brigham Young University gives also a two-year normal course, open to high-school graduates, to prepare teachers for elementary schools. Two other church schools, the Brigham Young College, at Logan, and the Snow Academy at Ephraim, Utah, offer the same two-year normal course. The other church schools in the United States offer only the standard high-school courses.

ATTENDANCE.

The total attendance for the year 1912–13 in the church schools located in the United States was 6,292. Of this number 3,423 were males; 2,869 females. All but 301 were of high-school grade. Boys to the number of 1,314 and girls numbering 1,835 were pursuing industrial courses. At the end of the year there were 600 graduates from standard high-school courses.

TEACHERS.

It has been found to be true in the church schools, as in the public schools, that buildings and equipment are of less importance than the character and qualifications of the teacher. Recently, therefore, the standards required of teachers have been considerably raised. In the first place, every teacher in a church school must give satisfactory evidence of high moral character and of faithful activity in the church. In the second place, every teacher must meet the requirements of scholarship prescribed by the law of the State in which he is teaching. In this way there has been assembled in the Mormon Church schools a corps of teachers unexcelled in integrity and in scholarly accomplishments. The total number of teachers is 309—males, 222; females, 87.

Schools operated by the Mormon Church in the United States.

Schools.	Location.	Established.	Enrollment in 1912-13.	Cost in 1911-12.
Brigham Young University	Provo, Utah	1875	1,305	$116,000
Brigham Young College	Logan, Utah	1877	540	61,900
Big Horn Academy	Cowley, Wyo	1909	120	4,630
Cassia Academy	Oakley, Idaho	1888	158	7,000
Emery Academy	Castle Dale, Utah	1890	136	6,800
Fielding Academy	Paris, Idaho	1884	208	12,900
Gila Academy	Thatcher, Ariz	1888	174	10,000
Latter-Day Saints University	Salt Lake City, Utah	1887	1,146	62,000
Murdock Academy	Beaver, Utah	1897	215	13,000
Millard Academy	Hinckley, Utah	1890	125	9,000
Oneida Academy	Preston, Idaho	1888	242	10,500
Ricks Academy	Rexburg, Idaho	1888	333	15,300
San Luis Academy	Manassa, Colo	1906	101	7,200
Snowflake Academy	Snowflake, Ariz	1888	107	6,000
Summit Academy	Coalville, Utah	1888	64	5,000
St. George Academy	St. George, Utah	1910	234	5,250
St. Johns Academy	St. Johns, Ariz	1888	101	4,200
Uintah Academy	Vernal, Utah	1888	193	7,000
Weber Academy	Ogden, Utah	1888	485	25,000
Snow Academy	Ephraim, Utah	1888	305	15,000
Total			6,292	405,180

CHAPTER XIX.

THE METHODS AND MEANS OF HEALTH-TEACHING IN THE UNITED STATES.

By Fletcher B. Dresslar,

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Contents.—Origin and purpose of this chapter—Methods of health instruction—Federal health service—State boards of health—City health departments—Schools and colleges—The campaign against tuberculosis—Cleanliness—Sex hygiene—School hygiene—Mouth hygiene—Hygiene of infancy—Health teaching through nurses—Rural sanitation—Hookworm disease.

ORIGIN AND PURPOSE OF THIS CHAPTER.

In reply to a general request sent out about the middle of August by the Commissioner of Education a splendid amount of material in both printed and typewritten form was received from the various voluntary societies and organizations which are engaged throughout the country in general health propaganda. In his request for information the Commissioner stated that the material was desired for a chapter on health teaching in his Annual Report. When the material was gathered, digested, and organized it was found that there was a great deal more of it than could be included within the bounds of an ordinary chapter. It was decided, therefore, that instead of detracting from this material by reducing it to the limits of a chapter, it should be published separately, and that a general analysis of the methods employed and the topics presented should be prepared for this Report. This statement seems desirable to reassure those who kindly gave their time and service to preparing special reports and to sending material. Therefore it seems only fair to say to those who read this review that a completer and fuller account of the health-teaching work of the societies reporting will be found in a bulletin which will be published by the bureau for distribution at an early date.

The main purpose of this chapter, therefore, will be to set forth in a general way the methods and means employed by these societies and organizations to educate the people along the specific lines for which each was organized. For example, the various societies organized for the purpose of helping to rid the country of tuberculosis

have naturally developed their plans and prepared their campaigns for this specific purpose. Those which have given their chief attention to the dangers threatening from venereal diseases have gathered information and prepared material to educate the people in matters of sex hygiene. Likewise societies for the prevention of blindness have devoted their energies to teaching mothers and nurses the proper care and treatment of the newborn, as well as the dangers due to contagious troubles, such as trachoma and other diseases affecting the eyes.

METHODS OF HEALTH INSTRUCTION.

The most universally used means of spreading the gospel of good health to the general public has been the preparation, publication, and distribution of printed matter setting forth in a clear and simple way the facts to be promulgated. This printed matter has appeared in many forms, but in general it may be classified as follows:

Books.—Many books have appeared undertaking to set forth health requirements in a popular form. For the most part these have been written on special topics, and as most of them are on the market nothing further need be said here, save to say they cover such topics as medical inspection, sex hygiene, open-air schools and camps, conservation of health, rural sanitation, municipal sanitation, tuberculosis, disinfection, national vitality, mouth hygiene, home hygiene, school hygiene, infectious diseases, the care of children, etc. The interesting feature about these books from our point of view is the fact that a great number have been written not for physicians or health specialists, but for the general public. Hence, in most of them a simple and interesting style has been used. Their authors have undertaken to state the results of scientific work without the use of technical language, and more especially they have undertaken to outline some constructive policy or to detail some line of procedure which looks toward the preservation of health and the eradication of disease. So far as I know, with the exception of cyclopedias, textbooks, and books on agriculture, these new books on various topics of health work are the most successful attempts to popularize scientific knowledge.

Bulletins and pamphlets.—By far the greater amount of the published material has come out in the form of bulletins or tracts for free distribution. Some of these are models of popular writing, but some of them have exhibited somewhat crude methods of didactics. For example, many use the "don't" method. That is to say, they have tried to protect people by telling them what they should not do. Without doubt there will always be need of warning people of danger; but all who have learned to teach most successfully know that far more effective training and much more purposeful education

will come through a positive statement of facts and reasons than through the mere negation of action. Most people know by experience that a temptation to do a thing often develops because they have been forbidden without knowing reasons for such interdiction. The psychology of this form of disobedience deserves the attention of those who prepare these publications. These bulletins have, as a usual thing, been written to meet special conditions, and hence treat either a single topic or a few related topics. Each society or organization has published matter relating to its special line of work, and thus in the total a very wide range of health topics has been emphasized. When these are brought together, they make a considerable literature on health teaching. Many of the publications are illustrated with suggestive cuts and graphic representation of facts, and figures so as to impress the memory most forcibly. In general, there is a commendable degree of conservatism shown by the writers of these pamphlets; but sometimes enthusiasm outruns the facts, and overstatements result. Some writers need to learn the lesson that the safest and wisest method of teaching is to evaluate a fact for its exact worth and to remember that in the long run an overstatement is always an untruth. Enthusiasm and earnestness are necessary elements in all successful teaching, but honesty and fairness are still more important. If unquestioned faith on the part of the people is desired, scrupulous honesty, as well as authenticated facts, must be used in teaching them. The almost universal habit of a specialist in any line of work is to look upon his special field as the most important within the range of human knowledge; hence he is prone to overstate the value of the facts with which he deals, and therefore to mislead the common mind for whose sake in the long run the work was done. Absolute and persistent loyalty to a cause depends on an unshaken faith, and in the final analysis this faith must be built on the solid foundations of truth. One can frighten people into a temporary belief, but he can not terrify them into a real education. These principles apply to popular education with more validity than to scientific workers.

Lectures.—Throughout this whole spontaneous campaigning for good health, the lecture method has been a dominant factor. With scarcely an exception all the societies engaged in any way with health teaching have depended on public lectures and "talks" to start the work and kindle enthusiasm. The appeal of the human voice and the direct contact of spirit with spirit in popular teaching is still the most potent authority over the popular audience. However, the illustrated lecture and the motion-picture method are gradually being more and more introduced. When an audience can see the house fly deposit its eggs in a mass of rubbish, the maggots emerge, and

the whole chain of developments, from the egg to the full-grown fly, take place within a minute or two, a tremendous impression is made, and much time is saved. Mere talk about germs makes a far greater demand on the credulity of an audience than is made when they see these things highly magnified and projected upon a screen. With the masses, seeing makes for immediate belief. Hence, greater and greater use is made of the stereopticon and the moving-picture film. I am sure that this method holds in store for us much greater things, for we are just entering on an era of greater scientific use of this wonderful adaptation of the microscope to photography. By and by chemical reactions and physiological functions will be rendered visible, and the dangers to life will stalk in the fields of clear vision.

Newspaper work in health propaganda.—The press of the country has been exceedingly liberal during the year in publishing general articles on various phases of public health and reporting the work of the numerous societies which have devoted their time and attention to this work. The "news-letter" is a comparatively modern method of getting before the public all kinds of information. Many of the National and State societies have prepared great numbers of special articles on different phases of public health, have duplicated these, and have sent them broadcast to the newspapers. By reason of the fact that they are written in a popular style and contain useful information that makes good reading, the press of the country has been not only willing, but glad, to publish them. Some societies have reported that they have thus put before the people through hundreds of newspapers a great many articles designed to teach the people how to develop their health as well as to prevent illness. Thus country newspapers have been furnished acceptable copy without expense, and multitudes of people have had a chance to learn many valuable lessons. The popular magazines have also done a large share of educational work by presenting to their readers much important matter relative to public health and hygiene. The extension of the rural mail delivery has greatly aided in scattering this material to all parts of the country.

Exhibitions.—Of recent years exhibitions have increased at a very rapid rate until scarcely a city or school has not held, sometime during the year, a series of exhibitions illustrative of the various phases of educational work. In these exhibitions the attempt is made to present in an instructive form the facts and conditions of the subject toward which the public mind is directed. The various organizations which have undertaken health work have not been slow to take advantage of this method of popular education. Perhaps it is not far from the truth to say that we are yet in a somewhat crude stage of development with reference to our exhibition work. Just as in all methods of procedure, a new movement is usually at the mercy

of enthusiasts who are not always in a proper spirit to distinguish clearly between the value of truth and the value of the unusual. It is exceedingly difficult to prepare material for a popular exhibition and at the same time to tell the whole truth and nothing but the truth. At best only isolated groups of facts can be presented, and often they are so dissociated from their true setting that they give an erroneous perspective. In addition to various forms of graphic illustrations, photographs, and many kinds of charts, the tendency is more toward introducing models illustrating better methods of procedure rather than calling attention to the conditions that now exist. In America competent model-makers are comparatively scarce and especially those who are at the same time capable of appreciating the value of truthful representation. The period of model-making with us is just beginning and without doubt will become a much more potent factor in popular education than it is at present. Many societies are calling for aid in preparing exhibitions, and they need guidance and help, if this form of educational endeavor is to meet popular expectation. I believe it would be a splendid departure for some of our higher teacher training schools and universities to make special provision to assist the people in arranging local exhibitions and guiding them so that the impressions gained from such exhibitions will be truthful and at the same time cogent and forceful. There is no doubt concerning the method of this form of education, but many of those who are using it are working more or less blindly, without any guiding principles, and are more interested in presenting novel material than they are in its comparative value. Universities and normal schools that are especially interested in furthering education among the masses are losing a splendid opportunity for service by neglecting to offer expert help and guidance in this direction. There ought to be a professor of popular education in such institutions whose business it would be to gather and evaluate material, arrange it, and plan to help the people present it in the most effective way. Thousands of people are daily studying exhibits in the cities and towns of our country, and a great opportunity for social service and popular education is more or less unintelligently managed and unrelated. To be of most use these exhibitions should be closely related to local conditions and developed in such a way as to insure active betterment of conditions. Hence, not only the mere facts but constructive policies and plans should be outlined or developed into models to guide and instruct the people. For example, if country people could see an exact duplicate in miniature of a well-ordered and a properly constructed sanitary system for rural homes, and in addition could have it explained by one who understands from both points of view, not only information but guidance in construction would result.

Due to the almost limitless use of electricity in producing striking results with automatic devices, another kind of illustrative material is more and more largely used. For example, it is a well-known fact that those babies who are nursed by their mothers, other things equal, are much more liable to live than are those brought up with artificial foods. But if 100 lights representing 100 babies on one side and the same number on another side are put out at the same rate as the death of the babies in each group this fact is more favorably brought to the attention of the average onlooker. In a similar way a device showing the rate of death from tuberculosis in our country will express the truth to the people more quickly and will produce a more lasting impression than mere statistics will ever do.

One who reads the general accounts given by these societies of their health work will not fail to see how they are groping in the dark for better methods for illustrative teaching and also the dangers of possible overstatements and incorrect emphasis. The specialist in exhibition material needs also to be a person of scientific acumen and sufficient self-control to prevent the subordination of truth to striking methods of appeal.

Clinics.—Another mode of appeal has developed through what is now popularly known as clinics. This word in its original meaning more nearly described instruction given in hospitals at the bedside of a patient. The word comes from the Greek κλινη, meaning bed. It is now used for any sort of public meeting place where people are treated for diseases or defects, or even where people teach mothers how to feed children in a scientific manner and to prepare the proper sorts of food. Thus many so-called clinics are chiefly voluntary schools of a very definite sort to teach the people better methods of caring for their health.

Congresses and meetings.—With the development of rapid transit and the habit of traveling, which is perhaps more marked in the American people than in any other nation on the globe, an astonishing number of associational gatherings and meetings are held all over the country. A large majority of these introduce into their program discussions bearing on topics touching public health. However, a great many organizations whose chief purpose is directed to other fields of work have indirectly been of service in presenting to popular audiences the gospel of good health and the doctrines of public hygiene. A large number of meetings of women's clubs, congresses, and conventions, local, State, and National, are held each year. Most of these give large space on their programs to matters of public health. One is almost tempted to say that such gatherings have multiplied almost to the limit of usefulness. Scarcely a profession or a trade is without its organization and its annual or semiannual gathering. There are associations for teachers, doctors, lawyers,

tailors, bankers, merchants, manufacturers, barbers, janitors, and possibly gravediggers. One can scarcely go through the programs prepared for these gatherings without finding something in the nature of public health discussion. There are literally hundreds of such organizations, and no one can deny to them certain values in this all-prevailing health revival. Naturally the doctrines preached vary with the point of view, but after all they are on the whole more nearly in accord than any other doctrine preached so generally.

Those who have arranged the programs for these gatherings have been wise enough to ask for the help of those who have given special attention to public health and hygiene, and hence, in general, such topics have been carefully and wisely presented. Many of the larger associations, such as the National Education Association, the American Medical Association, the Woman's Christian Temperance Union, and others of ranking importance, have special committees whose business it is to devote their time and attention to health propaganda. The same method of organization has been used in many local and State societies, so that in their public meetings attention is given to this phase of work.

FEDERAL HEALTH SERVICE.

The National Government does its chief educational work along the lines of health, through its Public Health Service, the Bureau of Education, and the Department of Agriculture, though the War Department has indirectly done a splendid service in taking the lead in sanitary measures especially against yellow fever, malaria, typhoid fever, and bubonic plague. The Public Health Service, the Bureau of Education, and the Department of Agriculture have served the cause of health chiefly through published documents and lectures. The scientific investigations of the Public Health Service have also been of much direct and indirect service to State boards of health and to the cause of preventive medicine in general. The Federal Departments are all showing an increased interest in the health movement as a part of the larger task of national conservation, and it is only a question of time, I believe, till a Department of Health, coordinate with the other Cabinet offices, will be established and work in this direction correlated and extended.

STATE BOARDS OF HEALTH.

The various States through their State boards or commissions of health are rapidly extending their work to include more of preventive measures and more direct educational work. They are all engaged in publishing some form of bulletin or document which they distribute to the people of the State without cost. These bulletins, in addition to statistics relating to the various health conditions of the State,

especially regarding contagious diseases, contain much information relative to the prevention of the spread of disease and to the general problems of sanitation.

Most of the State boards in the Southern States are closely affiliated with the Rockefeller Sanitary Commission for the eradication of the hookworm disease, and more or less directly with the boards of education of other States. Some of the States in the North, notably Massachusetts, New York, Pennsylvania, Indiana, and Wisconsin, have given their State boards of health larger authority and more money for their work. In addition to the ordinary bulletins which are issued regularly, most of the State boards of health are publishing special brochures on specific topics such as tuberculosis, typhoid fever, diphtheria, the house fly, and many other topics. It is notable that these publications have been written for the public, rather than for the medical profession. They are in the main expressed in untechnical language, are often well illustrated, and are serving a splendid purpose. One of the best illustrations of educational work in this line is furnished by the State of Indiana. The board of health of that State has for a number of years been sending out lecturers and exhibits to instruct the people with reference to the prevention of disease, especially tuberculosis and typhoid fever. This board works through the various local organizations of a community, through the public schools, and through health officers, studying local conditions, speaking to the people in public mass meetings, lecturing to children in the public schools and exhibiting to them modern methods of sanitation, and preaching the doctrine of health preservation. In this way they come into contact with thousands of people annually and strive to make their duty as quarantine officers as unnecessary as possible.

Several health boards, notably those of California and Louisiana, have health cars equipped with an exhibition on sanitation. These cars are carried all through the State, stopping at towns, villages, and cities, showing the people better modes of living, and interesting them in the general problems of health. These peripatetic messengers of health have created a public conscience for cleanliness and wholesomeness which perhaps could not have been brought about in any other way. They have shown the people how to have sanitary water supply, build comfortable sanitary homes, take care of milk, care for children, and protect their homes from the dangers of contagion and infection.

The health board of Minnesota employed a special agent to visit the various towns and villages throughout the State to interest the school people and general public in the problems of school hygiene. By lack of the necessary appropriation from the legislature, this work will not be carried on the coming year.

Many State boards of health are joining with universities and colleges in delivering series of lectures to students on various problems of public health, and in this way dealing with those who will be especially influential in the years to come. In the aggregate the State boards have in the past year made commendable progress in devoting more of their time to the general education of the masses concerning the conservation of health and the prevention of diseases than they have in any year heretofore. Special attention has been given to protecting the people against infected water supply, to securing better sanitation in public carriers and public buildings and more stringent supervision of the laws regarding vital statistics and similar matters. In practically all of the States the machinery now exists for making State boards of health far more effective as public teachers of health than they have been. What is needed most of all is better financial support on the part of the legislatures. The average legislator does not fully realize that the preservation of the health of the people is one of the best means of investment for financial welfare as well as moral welfare. Without doubt the future will call for more service from all the State boards of health and will demand of legislatures better support.

If I may dare to suggest where the need is greatest and where the help is least frequently given, I would say that State boards of health should give more of their time to the country districts. By properly cooperating with various county boards of health or local associations, voluntary or public, each State ought to be organized into a unit, so that wherever there is need, help could be quickly furnished.

The public schools are vitally concerned in all matters of health teaching, and the State boards of health, as well as county and city boards of health, can well afford to cooperate with them and bring to their help needed information and plans for work. In the main, this is the direction in which progress is making, and it argues for more effective educational work.

As an illustration of what may be done to bring health teaching more definitely and quickly to rural communities the method used in Porto Rico may be cited.

A specially built wagon is fitted out with moving-picture apparatus, supplied with the proper educational films designed to illustrate the dangers of mosquitoes, flies, and other pests, and is sent from town to town to give a free moving-picture show, so that the masses of the people can see and hear.

Some of our State boards of health should profit by this suggestion and, in cooperation with each county board of health, equip a wagon to meet the needs of the county and send it out to all the people and interest them in health matters. This would carry the work of the health train to the country, where, it seems to me, the need is greatest.

CITY HEALTH DEPARTMENTS.

I believe it will express very nearly the truth if I say that during the past year city health departments have given far more attention than ever before to searching out serious sources of infection and urging people to take precaution against disease. Of course, there are always exceptions. It is generally true, however, that the public water supply is more carefully guarded and more frequently tested, the public milk supply has been put under stricter rules, and better obedience to these rules is demanded. The matter of housing has received increased attention, but not as much as it demands. In most cities special precaution has been taken with reference to ophthalmia neonatorum, exposure to tuberculous patients, public drinking fountains, the prevention of dust and smoke, more stringent rules against use of unguarded machinery, and general recommendations with reference to the use of antityphoid serum; and larger numbers of people than ever before have been reached through public lectures and published material.

A number of the city boards of health have charge of the medical examinations of the public-school children, and through this work they have come into immediate contact with the whole population. The health boards of a few of the larger cities of the country have divided their work into various departments, and have in this way been able to set aside certain helpers whose business it is to work with the people and teach them the care of the health of both children and adults. The department of child hygiene of the New York City health board is a good illustration of how a city may, through its general health department, extend its work to the care of its children.

In reports presented this year many city boards of health have stated that their chief work consists in education of the public in matters of preventive medicine and hygiene. This is a new attitude, and it is going to be more marked in the future than it is in the present, for it can not be other than sane and sensible to try to anticipate difficulties and prevent them, rather than to wait until they overtake us and then try to overcome them.

SCHOOLS AND COLLEGES.

There have been comparatively few marked advances in health teaching in the various schools and colleges during the year over that of previous years. Probably the most noticeable advances are those made by Harvard College in cooperation with the Massachusetts Institute of Technology, by the University of Wisconsin, and the University of Virginia through its department of education. Harvard College and the Massachusetts Institute of Technology have in cooperation established a school for health officers, in which courses

are given leading to the degree of doctor of public health. The principal purpose of this school is the preparation of young men for public-health work, especially to fit them for administrative positions, as officers or members of boards of health, or of various organizations looking toward the public welfare. The University of Wisconsin has organized a number of its schools and colleges into what is known as a "health instruction bureau." This bureau is connected with the extension division of the university. It offers help through lectures, various publications, expert consultations, and a general bureau of information on all matters touching the health of a community. The whole purpose of the bureau seems to be to serve the people by bringing to them the latest and most helpful knowledge pertaining to the health and comfort of the people and to show them how to apply this knowledge in practical affairs.

The University of Virginia, through its professor of education, Dr. Heck, has been engaged in a special health campaign in Virginia during the past year. Prof. Heck spends four or five days every week in the field, and lectures at the university on Saturdays only. It is his business to go out among the people, especially to teachers' gatherings, mothers' clubs, and to all organizations which have a special interest in school work, and to spend his time teaching the teachers and the pupils in the public schools the doctrines of health and sanitation, especially in those things which have to do with school life. In this way he has been able to cover a considerable part of the State in a complete way and has not only served to teach the people, but he has learned to know the conditions and needs of the State better than could possibly have been known in any other way. I know of no other university in the country which attempts to do the same sort of field work.

Possibly the most urgent need of better courses of general hygiene is shown by the normal schools of the country. Comparatively few of them appear to have awakened to the need of teaching rural hygiene. By the very nature of their organization they are giving their chief time and attention to the preparation of teachers for the rural schools. No more vital knowledge is needed on the part of such teachers than that which relates to the welfare of the child in school and out of school. So far as I can determine, very little advance has been made in the normal schools during the past year in vitalizing and transforming the old subjects of physiology and hygiene.

THE CAMPAIGN AGAINST TUBERCULOSIS.

In addition to the national societies whose efforts are directed toward preventing the great loss of life and the untold economic waste caused by tuberculosis, practically all the States and larger

cities have antituberculosis leagues or societies organized for a similar purpose. Besides these there are many local societies whose work consists largely in efforts against the spread of this disease. The main work of these organizations may be summarized as follows:

(1) They are teaching the people through printed matter, exhibitions, and lectures that tuberculosis is a contagious disease and that those who are seriously afflicted are menaces to the public health unless they are prevented from mingling with the people in the customary way. They are pointing out the fact that during the process of coughing and spitting great numbers of the bacilli are thrown from the mouth, and that when these are dried and lifted into the air they are liable to infect others, especially those whose physical condition exhibits a low degree of resisting power. As a result of this agitation some States are establishing county tuberculosis sanitariums. Wisconsin is a conspicuous instance.

(2) They are teaching the people that tuberculosis is a curable disease if taken in its early stages. The treatment advocated includes living and sleeping in the open air, cessation from fatiguing toil, and abundance of nourishing food. Many societies and business organizations are going further and in a more or less cooperative way are undertaking to make it possible for patients of slender means to quit work and give their time and energy to overcoming the disease before it is too late. Furthermore, they are teaching the people that the best time to fight is before they are attacked. Hence there has been prepared especially valuable literature on the great need of fresh air and on open-air sleeping apartments for all. Some of these publications contain not only a statement of needs, but specific and detailed information of how to meet them. In this regard they have done better service than the average textbooks on hygiene, and should be in the hands of all teachers, especially rural-school teachers.

(3) They are acquainting the people with the fact that many children suffering with what hitherto has been considered mere skin diseases are in reality tuberculous; and thus they have paved the way for more rational treatment of such children.

(4) Bad housing in congested centers has been a fertile source of contagion, and hence people have to be taught that it is in the long run more economical to prevent illness by living under wholesome conditions than it is to economize on rent at the risk of health. Many organizations are working for legislation which will force the construction of more sanitary apartment and tenement houses and will condemn those now in existence which are insanitary and generally unwholesome. People must be protected not only from their own ignorance but also from the avarice of landlords.

(5) Boards of education have been importuned by these societies to make greater provision for open-air schools into which may be

gathered those children who are anemic, and whose inheritance and home conditions predispose to tuberculous infection. A number of cities owe their open-air schools to the influence these societies have brought to bear in a legitimate way upon the general public.

CLEANLINESS.

A great number of societies, notably the charity organizations, have found it necessary and valuable to direct their work toward teaching the poorer classes of people in a definite way the dangers due to personal uncleanliness and dirty methods of handling food supplies. They have followed up this line of work by inaugurating a movement for public bathing facilities and opportunities for laundry work. Such work has brought to the attention of the general public the utter lack among the very poor of facilities for bathing and the absence of decent opportunities for washing garments and bedclothes. Unless people have the means of keeping clean, it is more or less a waste of time and energy to preach to them the value of cleanliness. If the laws of a State and the ordinances of a city permit families to occupy a single room in a tenement house where not even running water is furnished, not to mention room for a bathtub or a laundry, it is a foregone conclusion that the health of such people and of those with whom they come in contact will be jeopardized. Surely no more fundamental health teaching for such people can be undertaken than to insist that better sanitary conditions be provided in tenements, and then that those who occupy them shall live accordingly. Otherwise, it is a hopeless task to instruct them in wholesome living and the hygienic care of their children. Many poverty-stricken people from foreign lands are willing and ready to hear the gospel of cleanliness, but they can not obey its doctrines for lack of the necessary means.

SEX HYGIENE.

Perhaps no health topic now before the general public has received more attention from the various voluntary societies during the past year than that of sex hygiene. The nature of the subject has unfortunately attracted a good many people to its consideration out of mere curiosity, but in fairness it must be said that the novelty of the subject has been largely due to the general ignorance of the public regarding such matters. In practically every State and city in the country societies have been organized for the prevention of venereal diseases, and most of them have published a large amount of material calling attention to conditions and suggesting various remedies. Perhaps the most extensive method of work used has been that of lectures before organizations of all kinds, such as

women's clubs, men's clubs, churches, Young Men's Christian Associations, Young Women's Christian Associations, civic organizations, teachers' associations, clubs and societies of manufacturing plants, etc. The secretary of one of the State societies organized for the prevention of social diseases states that—

> as a result of a two years' campaign by this method the whole State has been aroused to the importance of the subject, so that every association and club in the State is undertaking as a part of its work to instruct the people to develop means of eradicating these diseases.

Many societies have secured permission from school boards to present this subject to the high-school children of cities and to the patrons of the school. A number of prominent cities throughout the country are preparing to organize courses of instruction in this subject to be presented to the pupils of the upper grades and to those of the high schools. A large number of books have been written to guide teachers and parents in the instruction of children in the subject, but no thoroughly satisfactory plan has yet been formulated, and possibly it will take a number of years of experience and consideration to develop an acceptable course of study on this subject for the public schools.

A committee has been appointed in connection with the department of school patrons of the National Education Association to prepare a course in sex hygiene for use in normal schools. Mr. W. B. Owen, of the Chicago Teachers' College, is chairman of this committee. A report on this work will be presented at the February meeting of the department of superintendence at Richmond, Va.

One method of general education along the line of sex hygiene which has been used with marked influence during the past year has been that of exhibits. Starting with the remarkable exhibit which was made in connection with the Fifteenth International Congress on Hygiene and Demography in Washington in September, 1912, the use of such exhibits has grown enormously during the past year, and they have invariably attracted a notable amount of attention. A thousand copies of Brieux's play, Damaged Goods, have been scattered throughout the country. Some cities, notably Syracuse, N. Y., have made what they designate "moral surveys" and have published detailed studies of results of their investigations. The Syracuse society for the prevention of social diseases recommended to the bureau of health the advisability of introducing the teaching of sex hygiene in the public schools. Throughout the length and breadth of the country the results of various investigations into the extent of social diseases have been studied and the people have been aroused in an unusual way.

Possibly no topic presented at the Fourth International Congress on School Hygiene at Buffalo, held in August, created so much interest

and attracted so much attention as the addresses on sex hygiene. There has been some fear expressed in various quarters that the general teaching of facts relative to this topic might in many cases be unwise and harmful. If I may judge from the evidence I have gathered from looking through the reports and examining the results of the work of the various organizations throughout the country, I would say that thus far the discussion and agitation of this subject have not passed the bounds of reason and have been, on the whole, conducted in a sane and safe way. Of course any new subject has to be delivered from overzealous enthusiasts who are ready to join in any new movement merely for the sake of self-advertisement. Fortunately, I think these have been few in number and the general movement has been in the hands of well-balanced and morally safe people. It would be impossible to estimate the value of the tremendous amount of teaching, direct or indirect, that has been done on this subject during the past year, but truth presented in an unselfish and unbiased fashion is always powerful. The main precaution now to be taken, if I may be permitted a judgment in this connection, is to limit as far as possible the overstatement and exaggeration of supposed facts. Certain printed documents have been spread broadcast which would tend to lead to the belief that from 30 to 40 per cent of the people of the country have been or are now afflicted with one of the unnamable diseases. What the truth is nobody knows, and it would be much safer and better to leave estimates of the extent of these diseases until far more authoritative information has been collected.

SCHOOL HYGIENE.

A great awakening has taken place in the past few years with regard to school hygiene and school sanitation. This movement has furnished a theme for a very large number of women's clubs, educational associations, medical societies, home and school leagues, and a host of other organizations. All people are interested in the education and development of the children of the Nation and much good has been accomplished by these combined, if not concerted, efforts to make our schoolhouses more sanitary and to furnish larger playgrounds for the children. Medical inspection of school children has grown at a rapid rate, and this growth has been due in no small measure to the public sentiment aroused by these local societies. It would be impossible to state with exactness what particular measures have received the most attention, but among them would be found medical inspection, ventilation, the need of open-air schools, school lunches, playgrounds, and sanitary drinking fountains. Of course a great many other topics have been considered and emphasized, but these topics have doubtless received a larger share of consideration.

The educational work in school hygiene which has been undertaken in this voluntary way has proceeded generally through meetings of mothers and teachers, before whom those who have made a special study of school hygiene have discussed matters in a simple and untechnical way. The movement for school lunches is due largely to the initiative of those home and school leagues and women's clubs which have undertaken to minister to the needs of the anemic children in attendance upon the schools. In connection with open-air school work, as well as with the regular classes, this service has been of great value and promises even larger returns. If I may be permitted to suggest one topic which these organizations should study with more care and should bring to the attention of local authorities in a definite way, it is that of the great need for larger school grounds. Despite all that schoolmen can do, city and county boards of education constantly persist in locating school buildings on meager plots of ground and often in congested and noisy centers. Such locations are far more serious blunders than the average community conceives. Dirt and dust, noise and confusion, lack of playgrounds, danger from fire, and more serious danger from moral contamination must be contended with as the result of such blunders. I am persuaded that if the various civic and social clubs of the smaller cities of America were to devote a part of their time and energy to teaching the people the seriousness of locating great school buildings in such places a marked improvement for the betterment of these conditions would be immediately seen. A multitude of topics is considered in this campaign for better health conditions in the school and, generally speaking, the work has been wisely, courageously, and unselfishly done. The evidence shows, however, that the time has come when the societies must depend more upon the guidance of those who have special knowledge in these fields in addition to the desire to be of service to the children. Commendable progress is being made in many cities by introducing departments of hygiene and sanitation which not only have to do with the sanitation of school buildings and school appliances, but with the physical education and development of the child. Many school improvement leagues and similar associations have published leaflets and various sorts of helps designed to serve the rural school-teachers especially. As an example of this, the Alabama School Improvement Association, which is affiliated with the State education association, distributed last year 2,500 health circulars. These were all sent to the teachers of rural schools. When one considers how little these teachers have in the way of helps and suggestions outside of the ordinary textbooks, one can appreciate more fully the real value of such work.

The park and playground movement, which is closely related to the movement for school hygiene, has received a great impetus during

the past year. This has come about through many agencies, but back of it all one can see the effects of the gospel preached by the various organizations. To cite a single example, the superintendent of playgrounds of Oakland, Cal., has 12 supervised playgrounds and recreation centers under his supervision; 10 of these are open throughout the whole year. They are equipped with outdoor gymnasia, athletic fields, tennis courts, swings, and slides, and are furnished with all sorts of opportunities for games. In connection with some of the playgrounds there are social halls for recreational purposes, shower baths, dressing rooms, lockers, and all the equipment of a modern club. These are open and free to the public. While such a city as Oakland, with its equable climate, has many advantages over those in more severe climates, nevertheless, much more can be done than is done to give the children a chance to play and thereby develop in a natural way the powers of their bodies.

MOUTH HYGIENE.

The oral hygiene committee of the National Dental Association has outlined for its year's work the further education of the dental profession regarding prophylactic treatment of the surface of the teeth for the prevention of decay, the introduction of questions on oral prophylaxis for State examining boards to use in connection with applicants for a State license, the establishment of courses in prophylaxis in colleges, the extension of popular lectures on mouth hygiene, and the further extension of the membership of the organization.

The National Mouth Hygiene Association is proposing to extend its work by organizing auxiliaries in various communities throughout the whole country, and by extensive publicity campaigns to secure a large membership in their organization and to raise funds for the establishment and maintenance of dental clinics. This association proposes to endow these clinics for the purpose of furnishing dental service and treatment without cost to the worthy poor. It also is attempting to furnish to the general public full information relative to the proper method of caring for the teeth and the kind of food especially necessary for children to give the teeth and jaws proper exercise and normal development.

Many local and State organizations affiliated with these national societies are rendering their communities special service in teaching the people the care of the teeth and in increasing the number of dental clinics. This phase of public hygiene has used to good advantage exhibits consisting of charts, stereopticon illustrations, and even a moving-picture show entitled "The toothache." The published material sent out by the various societies has been extensive and useful.

HYGIENE OF INFANCY.

The topic of the hygiene of the baby has received increasing attention throughout the year. Various organizations have done excellent service in their efforts to teach mothers the care of children, proper preparation of food, and in the general attempt to reduce infant mortality through the extension of visiting nurses, milk stations, "little mothers' leagues," recreation camps, and clinics. Out of this more careful study of the baby and its needs has grown what is termed the "baby show." By this is meant an organized effort to fix the attention of people upon the healthy baby and a study of the conditions which produce perfect specimens of the human infant. These baby shows have, therefore, incidentally been associated with a general awakening along the lines of inheritance and eugenics. It puts emphasis upon the health side and serves to develop a standard of normal infancy. This phase of the work has created a good deal of enthusiasm, and directly or indirectly has taught people the great advantage physically and mentally to those children whose inheritance and care are all they should be. Many women's clubs have declared that these baby shows have been the most helpful means that they have used in emphasizing the value of infant hygiene.

Closely related with this line of work there has developed in many cities special attention to the proper and considerate care of expectant mothers. This work has been especially emphasized in Boston.

HEALTH TEACHING THROUGH NURSES.

Medical inspection is never complete in a city until a competent body of visiting nurses are associated with the physicians in their work. These are sent to the homes and do what is known as "follow-up work." Here, coming in contact as they do with the conditions under which children live, they have a splendid opportunity of teaching nearly all phases of general hygiene and sanitation. But the work of public school nurses is only a part of the general opportunity offered to trained nurses. Numerous societies, city, State, and national, are introducing this work more and more. They have found that the best place to teach health and sanitation is in the home. There they learn at first-hand the conditions under which people live, and in this way know what information is most vital and immediately necessary.

Perhaps the most promising and extensive work of this nature is that connected with the American Red Cross rural nursing service. This is a national organization of nurses who have had special training and experience in public health work and other forms of social service. They are expected to go into the country and organize

classes in home care of the sick and to instruct the people in the care of patients. The Red Cross rural nursing service, it is expected, will eventually cover every section of the country. Up to this time nurses have been located in New York, New Jersey, Ohio, and Michigan. The service is in process of organization and will require a good deal of time for its completion; but when the work is thoroughly organized and sufficient nurses are employed, this service will constitute one of the most important health bodies in the whole country. Miss Fannie C. Clement is superintendent of this part of the Red Cross work.

RURAL SANITATION.

The need of knowledge of sanitation and of appliances in rural districts has not been dealt with adequately as compared with the interest these matters have awakened in cities. The chief reason for this backwardness is doubtless due to the fact that most organized efforts to further the conservation of health have developed in towns and cities, and these have been primarily interested in the welfare of their own immediate environment. Country people have been slow to organize themselves for the purpose of aiding in making country life more wholesome and healthful. There are, however, many notable exceptions. As an example, the New York State Grange at its annual session in February, 1913, recommended a visiting-nurse service for the country districts of the State. This movement is a very important one, and when such service is established it will afford one of the most significant health-teaching agencies possible in rural districts; for wherever a well prepared and thoughtful nurse goes she will invariably exert a helpful influence by teaching the proper care of the sick and better protection against sickness. It is astonishing how little country people know of the causes of typhoid fever, and of how to protect themselves against it. The special needs of rural communities from the hygienic point of view are a safe water supply, sanitary toilets, and abatement of the fly nuisance. Household ventilation and the proper care of food supplies are extremely important also. This knowledge is not brought to the attention of country folk as it should be.

The Negro Organization Society of Virginia undertook during the year a splendid line of rural health work in one county of that State. Their executive secretary was sent out not only to visit schools and help bring about in them better health conditions, but also to work with the country people and strive to induce them to construct sanitary privies at their homes, to ventilate their churches and their bedrooms, and especially to protect their wells and springs from contamination. The country churches have been used as the centers for this work and commendable and encouraging results have followed.

HOOKWORM DISEASE.

The Rockefeller Sanitary Commission for the Eradication of Hookworm Disease has done more real teaching in the country districts of the Southern States than any other one agency. The men who have engaged in this work have gone to the people, talked with them, examined them, and studied their home conditions. Best of all, they have made them believe through the cures they have wrought, and thus hundreds of thousands have learned for the first time that diseases have specific causes, and that when those causes are removed the diseases disappear.

Dr. Wickliffe Rose, administrative secretary of the Rockefeller Sanitary Commission for the Eradication of the Hookworm Disease, states that since the commission was organized in October, 1909, and up to June 30, 1913, 491,883 people had been treated for hookworm disease, and that nearly half of the number were treated during the year ending June 30, 1913. When it is known that each of the 11 Southern States is cooperating in this work and that in each State a staff of physicians and expert microscopists are giving their entire time to it, and all are teaching the people the sanitary measures necessary to prevent infection, one realizes the tremendous educational achievements of this campaign.

The poor people of the South have been greatly imposed upon by patent-medicine venders; for ailments, such as are introduced by these parasitic worms, have furnished the condition for an abundant harvest for all sorts of quacks with their make-believe remedies. If this campaign has done nothing more than to educate the people to the general causes of the disease and the need of proper sanitary measures to prevent continued infection, untold good has been accomplished. But thousands of weak and anemic children have been cured and the good results thereby obtained are lessons for the whole community. This work has required a great deal of skill and patience in dealing with people who were unwilling to believe, and, in a way, unwilling to be taught. However, the change in the attitude of the masses regarding this disease is a striking proof of how truth will prevail when it is presented in a clear and acceptable manner.

CHAPTER XX.

PROGRESS IN EDUCATION OF EXCEPTIONAL CHILDREN IN PUBLIC SCHOOLS DURING THE YEAR 1912–13.

By Lightner Witmer.

Director of the Psychological Laboratory and Clinic, University of Pennsylvania.

This report is based upon Bulletin, 1911, No. 14, by Drs. Ayres, Van Sickle, and Witmer, entitled "Provision for Exceptional Children in Public Schools." The report therefore naturally divides itself into two parts—a consideration of additions made during the year 1912–13 to the various classes for exceptional children, and a consideration of the facilities offered by universities and other educational institutions for the training of teachers of exceptional children.

CLASSES FOR EXCEPTIONAL CHILDREN.

To collect material for the first section of this report, questionnaires were sent to 52 State and Territorial superintendents of public instruction and to 883 city superintendents, a total of 935. The questionnaire was based upon the classification of work for exceptional children, as previously adopted in Bulletin, 1911, No. 14. It asked what progress had been made in the year 1912–13 along these lines, i. e., what new provision had been made. The blank questionnaire was sent to the superintendent of every town listed in the tables in the 1911 bulletin, and in addition to every other town large enough to figure in the list of the American Book Co. Return envelopes were inclosed. To appreciate the full significance of the replies, it is necessary to know the form of questionnaire employed. This was as follows:

Questionnaire.

Dear Sir: The United States Commissioner of Education has requested me to prepare a brief report on the progress made in the education of exceptional children in this country during the school year 1912–13. Will you be good enough to fill up the following questionnaire and return it to me in the inclosed envelope as early as possible before September 15? If you feel inclined to add a few words, describing just what new features or extensions of the work for exceptional children have been introduced in your school system during the year, I should greatly appreciate any additional information of this sort. It will be very helpful also if you will send me a copy of your latest printed report for purposes of comparison.

Very truly, yours,

(Signed) Lightner Witmer.

What NEW provision has been made in your school system in the year 1912–13 for the education of exceptional children? Please tell how many classes have been started, how large these classes are, how many teachers, and any other details which are important and interesting:

For delinquents?.....
For backward children?.....
For defective children?.....
Blind or semiblind?.....
Deaf or semideaf?.....
Open-air schools?.....
Day schools for foreigners?.....
Night schools for foreigners?.....
Vocational day schools?.....
Vocational night schools?.....
"Continuation" schools?.....
Parental or residential school?.....
Classes for epileptics?.....
Classes for late-entering children?.....
Classes for gifted children?.....
Vacation schools?.....
Special help teachers?.....
Classes for stammerers, stutterers, lispers?
Classes for crippled children?.....
Classes for incorrigibles?.....
Classes for mutes (not deaf)?.....
Classes for children from subnormal homes?
Do you have medical inspection?.....
Do you have physical examination for defects?.....
Do you have dental clinics?.....

The inquiry was limited to the public-school systems; private schools for backward and defective children, and State institutions for the blind and deaf and feeble-minded being omitted for several reasons. Most cogent of all is the fact that private schools are nowhere listed—indeed many of them expressly avoid such listing. It would therefore be impossible to obtain a sufficiently complete address list of these schools to make it worth while to ask them for a report of progress, even if their progress were likely to be of a kind that could be reported. As for the newly established private schools, the ones most important to an inquiry of this sort, the case is hopeless. No one but the few people directly interested knows where they are or what they are doing. The reason for excluding State institutions was somewhat different. It was expected that they would be reported upon by the State superintendents of public instruction, but all except three failed to mention anything of the kind in their reports, even when they made any report at all. The gratifying exceptions were Philippine Islands, Missouri, and Idaho, which will be mentioned later.

Twenty State superintendents out of a possible 52 made returns, about the same proportion as held for the returns of both State and city superintendents. In all, 330 questionnaires were returned (counting the report for the Philippine Islands as covering also Manila), or nearly 35 per cent of the number sent out. This in itself is a striking index of the apathy prevailing among administrators of public education with respect to a problem which should arouse their keenest interest and heartiest cooperation.

Twelve State superintendents had nothing to report. Two of these, the superintendents of Ohio and California, said they had "no statistics on this subject." Two others, Maryland and Kentucky, were evidently aware of what was done in certain large towns, and referred us to the local superintendents for information. Another, Maine, remarked that "the information is more readily given for a single school rather than the State." The superintendent of South

Carolina forwarded his report for 1912. Pennsylvania reported "nothing new was added to the legislation this year"; Texas, Arkansas, Iowa, Colorado, and Oregon apparently grasped the meaning of the inquiry, but had no progress to report. The returns from city superintendents, however, showed that Austin, Tex., and Little Rock, Ark., had made provision for exceptional children for the first time, and three cities in Iowa and three in Colorado had extended their provision.

Seven States reported progress, as did also the Philippine Islands. Satisfactory detailed reports were received from New York, New Jersey, and Wisconsin. Michigan has passed a law giving the care of blind babies to the State board of education, and at the time of writing (September, 1913) one child was cared for. Missouri has provided for a State reform school for negro girls. Kansas has a new law making night schools possible as a part of the regular school organization. The Idaho Legislature has made an appropriation for building a school for the feeble-minded. In Manila a school for the deaf and blind was established, in which were five classes for deaf and three classes for blind children. Two other institutions have been established and conducted by the Catholic Church. The first of these, the Hospicio de San José in Manila, is an orphanage giving academic and industrial training to about 250 boys and girls. The second is a reformatory for boys at Lolomboy, Bulacan, where industrial as well as academic training is given.

As might have been expected, the reports from city superintendents, while preserving the same meager proportion of returns, were numerically more impressive and were much more satisfying in detail. Although information was plainly requested about *new* provision for exceptional children in the year 1912–13, a great many included provisions which had been in force for several years past, and this necessitated a laborious checking over of all returns by comparing them with the tables in the 1911 bulletin. Other superintendents anticipated history by setting forth what they were planning to do next year, and these data had likewise to be carefully eliminated.

The greatest progress in organization and the most interesting report were made in Philadelphia. Dr. Cornman's letter inclosing the questionnaire is an illuminating example of brains applied to educational problems. I quote from Dr. Cornman's letter at length, because it introduces an administrative change in the nomenclature of special classes which can be recommended for adoption:

> You will see from the inclosed questionnaire that little *new* provision in the way of additional classes and equipment for exceptional children was made during the year 1912–13. During that year, however, the entire corps of special class teachers, principals having special classes, and district superintendents interested were organized in a committee which did effective work in the study of problems connected with these classes and in the preparation of suggestive outlines of work, daily programs, etc.

This material will be mimeographed and tried out in the classroom with the idea of printing it later with the modifications suggested by experience.

You will be specially interested, I think, to learn that, as a result of the consideration of the classification of the children of the so-called "disciplinary" and "backward" classes, a somewhat different scheme of grading and nomenclature than that heretofore used has been worked out. So many of the pupils of the disciplinary classes were found to be very backward, or even mentally deficient, and so many of the backward classes were of the mixed type, that the distinction did not seem useful enough to retain it. It seemed better to lay the emphasis entirely upon the ways and means of securing the better development of the pupil. Using the term you use in the psychological clinic, the classes may be designated as "orthogenic," this term superseding the terms "backward" and "disciplinary" heretofore employed. It has the advantage of characterizing the classes by the aim or method, rather than by terms more or less opprobriously descriptive of the children themselves. The same practice can be applied to other types of special classes; for example, "orthopedic" for crippled children, "open-window" for under-nourished and anemic children, "open-air" for those with active tuberculosis who must be by law segregated in separate buildings.

It has been customary heretofore to designate the grade of the children as nearly as possible in the special classes in rough accordance with the grading in the regular classes, the special class under such a plan having perhaps several of the eight elementary grades represented in its enrollment. This is so inaccurate, and has so many other obvious disadvantages, that it seems better to employ a simpler grading as follows:

"A" designating pupils of low mentality held in special classes pending proper institutional provision.

"B" designating pupils of a grade of mentality above the institutional type, but not to be regarded as candidates for return to regular classes.

"C" designating retarded pupils of higher mentality who ought to be restored, if possible, to regular grades; also pupils able mentally to do work of the regular grades, but who, by reason of moral deficiency, can not be permitted to attend them, these pupils to remain in special classes until better provision can be made for them.

It is believed that these classifications will encourage the teacher to approach the problem from other points of view than that of the regular classroom, and assist her in escaping from some of the distinctions, ideals, and traditions of regular class work which do not properly apply to the special class.

The greatest contrast to this letter is offered by a superintendent whose interest, it is easy to see, is far removed from the education of exceptional children. He says:

Under separate cover we are sending you a copy of the school laws of ———. You will see by referring to this book that most of the questions which you have asked in your letter of August 13 are taken care of either through the State schools, county organizations, or our parochial and vocational schools.

A letter, which carries with it a rich flavor of the fine old early Victorian style in education, comes from a southern city. The superintendent writes:

Ours is a public-school system; the object and effort is to give the children a practical and substantial education, such as will fit them for the practical problems of life. We do what we can to fit them for good citizenship; to educate them to understand that success in life for each individual depends upon well-directed individual efforts; that commercial honor, commercial integrity, is a large factor toward success; to live within their individual means; not to borrow from others with a view of not paying back; we want them taught to be against anarchy and anarchists, against socialists and socialism—all these *isms* they must get elsewhere. Further, we do not believe in

relieving the family, father and mother, of all the burden and responsibility of rearing their family.

It is pleasant to note that in spite of this superintendent's struggles, his school system is included in the table of cities making progress, on the strength of ungraded classes for backward, late-entering, and gifted children, manual training, and vacation schools.

In compiling the returns, the first table (Table I) was constructed to cover cities which were not included in the previous bulletin and were therefore regarded as having for the first time made provision for exceptional children. The second table (Table II) covers all the cities which were included in that bulletin and have since extended their provision by adding to the number of their classes or by starting classes for different kinds of children. Wherever the data permitted, a quantitative record was made of the number of each kind of class which had been organized. Where numbers were not forthcoming, a cross in the column indicates a qualitative improvement, i. e., something has been done of unknown extent.

Thirty-six cities in 24 States made provision for exceptional children for the first time; while 162 cities in 34 States extended their provision. Ninety-three cities which already provided for exceptional children had no progress to report, and 15 cities reported that no such provision had ever been made.

The most interesting from the point of view of this study are naturally the 36 cities which have newly come into the ranks of the progressive. They are very widely scattered over the country, the largest number in one State being 4 in California, followed by 3 in Pennsylvania, and 3 in Washington. The distribution by States and geographical divisions is summarized in Table III. In Table IV is summarized the distribution of the 162 cities which extended their provision. In addition to the classified returns, four questionnaires were received which could not be classified, because they were unsigned and the postmarks were obliterated.

THE TRAINING OF TEACHERS OF EXCEPTIONAL CHILDREN.

Courses in psychology and pedagogy, having the aim to fit teachers and other students for professional work with exceptional children, increased greatly in number during the year 1913. Many of the higher institutions of learning do not yet offer courses which either directly or indirectly serve to train teachers and professional experts with exceptional children, but several have undertaken this task, and teachers of exceptional children are now assured satisfactory courses at a number of institutions. Many also offered a more or less thorough training to students in the college and graduate school.

Perhaps it is but fair to say that these courses are most fully represented in the college, graduate school, and summer session of the

University of Pennsylvania. This institution was the first to offer courses, the direct object of which was to train teachers of backward children. As early as the year 1897 such courses were offered and a special class for backward children was organized and held daily sessions during the summer school. A psychological clinic also was first organized at this institution, and has been employed to demonstrate to teachers and other students the characteristics of these children, as well as to investigate their mental and physical status and to suggest approved methods of educational treatment. A number of institutions now provide such courses, chiefly at the summer session, three offer instruction through a psychological clinic, and three conduct one or more classes of exceptional children for purposes of student observation.

Up to the present time, with the exception of one class, the work has been confined to the various types of backward and feeble-minded children ordinarily to be found in classes for backward children in connection with the public schools. At the summer session of 1912 there was conducted at the University of Pennsylvania a special class for exceptionally bright children. There can be little doubt that this work in time will be extended to cover other groups of exceptional children than the merely backward. During the summer session of 1913 five classes for backward children were conducted at New York University, and a class was conducted for the first time at the University of California. In addition, the Vineland Training School (New Jersey) followed its practice of several years and most generously opened this institution to teachers of backward children. The institution provides board and training for these teachers. The types of children to be observed in this institution naturally are institutional cases, who properly should not be in public-school classes at all, but many of them are of mental grade the equivalent of perhaps about 50 per cent of the children to be found in the backward classes of our larger cities.

The State of Pennsylvania may justly take pride in the fact that two of its universities are offering courses of instruction and providing a psychological clinic and a special class for observation. In 1913 the University of Pittsburgh at its summer session offered four courses and presented a special class for observation; moreover, this work is continued during the regular academic session, and a circular announces that a special class, a Montessori class, will be organized this fall. This class, owing to the clinico-psychological methods of the Montessori system, falls within the type of educational work to be considered in this report.

In addition to the two Pennsylvania institutions, New York University offered in the summer session of 1913 nine courses and conducted five special classes. The University of California offered five courses,

and conducted a special class and clinical examinations; indeed, all the courses offered by the department of education at the summer session, with two exceptions, fell within the field of modern clinical psychology. Colorado State Teachers College demonstrated the position which this work has attained by offering a one-week's course on growth and retardation as a part of its general course prescribed for all students. In addition, lectures on exceptional children were given to special sections by four different instructors. At Columbia University a course was offered in pathological psychology and one on the psychology of childhood and exceptional children. At Cornell University a course in mental and physical tests for school children might be said to be related to this work. Harvard University offered a course on the psychology of the abnormal; the University of Montana offered several courses on exceptional children, one of them by Miss Morrison, a consulting school psychologist of Hibbing, Minn. The University of Washington, Seattle, offered a course on the education of exceptional children; Wittenberg College, Springfield, Ohio, offered a course on abnormal, backward, and feeble-minded children.

The following list of the courses at all institutions of learning in this country which offer instruction on the psychology and pedagogy of exceptional children has been prepared because of the assistance which it may be expected to afford teachers in learning what kind of instruction may be secured. As far as possible the effort has been made to list all courses by title, indicating the number of hours and whether offered to college, graduate, or summer-school students. Where it is not otherwise stated, one hour means one hour a week, or one hour a day during the summer session of six weeks.

COURSES IN THE PSYCHOLOGY AND PEDAGOGY OF EXCEPTIONAL CHILDREN.

	Hours.
Bryn Mawr College: Graduate school—	
Psychology and treatment of deficient and unusual children	2
University of California: Summer school—	
Abnormal psychology	1
Growth and retardation (half term)	1
Clinical psychology (half term)	1
Clinical examination of subnormal children	1
Training class for observation (9 to 12 daily), equivalent to	1
University of Cincinnati: College—	
Mental and physical tests	2
College of the City of New York: Extension courses for teachers—	
Psychology and education of exceptional children (hours as arranged).	
State Teachers College of Colorado: Summer school, 1913—	
Growth and retardation, in general course (1 week)	1
Lectures on exceptional children—	
Problems of the feeble-minded child (1 week)	1
Clinical psychology (1 week)	
Backward children not feeble-minded (1 week)	
Other phases of the subject (3 weeks)	

	Hours.
Columbia University:	
College and Graduate School—	
The psychology and education of exceptional children.	
Neurology and psychiatry.	
Summer School—	
Pathological psychology	1
Psychology of childhood	1
Psychology of exceptional children	1
Cornell University:	
College and Graduate School—	
Education of exceptional children.	
Mental development.	
Experimental study of school children.	
Summer School—	
Mental and physical tests for school children, equivalent to	1
Harvard University:	
Summer School—	
Psychology of the abnormal	1
University of Iowa:	
College and Graduate School—	
Mental and physical tests	2
Psychological clinic	2
Abnormal psychology	
University of Minnesota:	
College and Graduate School—	
Mental retardation.	
University of Missouri:	
College and Graduate School—	
The abnormal child.	
Abnormal psychology.	
University of Montana:	
College and Graduate School—	
Experiments with mental measurements (half year)	2
Mental pathology (half year)	2
Summer School, 1913—	
Exceptional children	1
Special lectures on clinical psychology, 1 week.	
Special class and lectures.	
New York University:	
School of Pedagogy—	
Anthropological study of children	2
Education of backward and feeble-minded children	1
Summer School—	
Abnormal psychology	1
Psychology of defectives	1
Pedagogy of defectives	1
Observation and practice in model school, 5 special classes (9–12), equivalent to	1
Laboratory course on tests of intelligence, equivalent to	1
Clinic, medical and psychological	1
Seminar on supervision and administration of schools and classes for defectives	1
Seminar on social aspects of mental defectiveness	1
Practical work in manual art for defectives	1
Administrative and social aspects of the special class.	

Ohio State University:

	Hours.
Undergraduate—	
Mental development	2
Abnormal psychology (half year)	3
The defective child (half year)	3
Measurement of intelligence	2
Seminar for diagnosis and treatment of exceptional children	

University of Pennsylvania:

College, Graduate School, and Summer School—	
Abnormal psychology	1
Child psychology A, infancy and childhood	1
Child psychology B, adolescence	
The psychological clinic A	1
The psychological clinic B	1
Orthogenics	1
Clinical tests and measurements	2
Clinical field work	4
Summer School only—	
Orthogenic practice A,[1] observation of special class instruction	1
Orthogenic practice B, observation of special class instruction	1
Social factors of juvenile efficiency	1
For college students only—	
Growth and retardation	1
College and Graduate School—	
The exceptional child (one term)	1
The training and treatment of the exceptional child (one term)	1
Graduate School only—	
Mental defects	1
Clinical methods	4

University of Pittsburgh: [2]

Undergraduate and graduate courses—
- Social psychology (3 credits).
- Social psychology and education (3 credits).
- Clinical psychology and study of exceptional children (4 credits).
- Educational psychology (6 credits).
- The care and treatment of exceptional children (2 credits).
- Psychoeducational pathology and educational therapeutics (2 credits).
- The psychological clinic (by arrangement).

Undergraduate courses only—
- Abnormal psychology (3 credits).
- Defective and delinquent children (3 credits).
- Supplemental study in abnormal or advanced general psychology (1 credit).
- Elementary child study (4 credits).

Summer School (10 weeks)—	
Abnormal mental conditions (one-half term)	1
Clinical tests and measurements (one-half term)	1
The psychological clinic (one-half term)	1
Manu-mental and industrial work for the backward, feeble-minded, and insane.	

[1] In 1913 no special class was held, but such classes will be conducted in 1914 and thereafter, probably also during regular academic year.

[2] Three credits equal to about one hour elsewhere.

University of Washington, Seattle:
College— Hours.
Psychology of exceptional children (half year)..... 3
Tests and measurements (half year)..... 2
Summer School—
Education of exceptional children..... 1
University of Wisconsin:
College—
Mental tests, laboratory..... 1
Wittenberg College, Springfield, Ohio:
Summer School—
Normal, backward, and feeble-minded children..... 1
Yale University:
Graduate School only—
Hygiene of child development (half year)..... 1
Norms of development (half year)..... 1
Backward, defective, and delinquent children in the public school..... 2
Clinical and research course (limited to advanced students)..... 1
The Training School at Vineland, N. J.:
Summer School—
Studying and observing in the classrooms (number of hours not stated).
Examining, testing, and studying children individually (number of hours not stated).
Lectures, quizzes, and assigned reading (number of hours not stated).

TABLE I.—*Cities reporting provision for exceptional children for first time.*

	Delinquent.	Backward.	Defective.	Blind or semiblind.	Deaf or semideaf.	Open air.	Foreigners, day.	Foreigners, night.	Vocational, day.	Vocational, night.	"Continuation."	Parental or residential.	Epileptic.	Late entering.	Gifted.	Vacation.	Special help teachers.	Stammerers, stutterers, lispers.	Crippled.	Incorrigible.	Mute (not deaf).	Home subnormal.	Ungraded schools.	Provision for— Medical inspection.	Physical examination for defects.	Dental clinics.	Playground.
Arizona:																											
Phoenix																×								×	×		
Arkansas																											
Little Rock			1													1								×	×	×	
California:																											
Alameda		1	1							1														×	×	×	
Sacramento					1	×	1	1									×				1			×	×	×	
San Diego		×			1	24						1		×	×		4				×			×	×	×	
Stockton						2																		×	×		
Colorado:																											
Greeley		×															×							×	×		
Iowa:																											
Mason City								×																			
Kansas:																											
Leavenworth																							×				
Maine:																											
Bay Point			×																					×	×		
Waterville								×						×										×	×		
Massachusetts:																											
Easton		×	×												×		×							×	×		
Winter Hill		1	1				1																	×	×	×	
Michigan:																											
Port Huron																								×			
Minnesota:																											
Cloquet																(1)								×	×		
Montana:																											
Anaconda									×						×	×											
Nevada:																											
Carson City		(2)	(2)	(3)	(3)																(3)			4 ×	4 ×		
New Hampshire:																											
Groton																×								×	×		
New Jersey:																											
East Orange		×	3						×							(5)	5			×				×	×		(5)
West Hoboken			2					5																			

[1] School gardens.
[2] Sent to home for feeble-minded in California.
[3] Sent to home for deaf and blind in California.
[4] In some schools.
[5] Summer playgrounds and vocational classes.

TABLE I.—*Cities reporting provision for exceptional children for first time*—Continued.

	Delinquent.	Backward.	Defective.	Blind or semiblind.	Deaf or semideaf.	Open air.	Foreigners, day.	Foreigners, night.	Vocational, day.	Vocational, night.	"Continuation."	Parental or residential.	Epileptic.	Late entering.	Gifted.	Vacation.	Special help teachers.	Stammerers, stutterers, lispers.	Crippled.	Incorrigible.	Mute (not deaf).	Home subnormal.	Ungraded schools.	Provision for— Medical inspection.	Physical examination for defects.	Dental clinics.	Playground.
North Carolina:																											
Raleigh	....	×	×	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	×	×	(1)	....
Ohio:																											
Dayton	1	×	1	....	1	1	....	5	1	12	1	....	....	....	....	....	20	....	....	1	....	....	....	×	×	....	....
Newark	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	2	....	....	....	....	....	....	....	....	....	....
Oklahoma:																											
Shawnee	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	×	....	....	....	....	....	(2)	....	....	....	....
Pennsylvania:																											
Hazleton	....	....	....	....	....	×	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Johnstown	....	×	....	....	....	....	....	....	....	....	....	....	....	....	×	....	....	....	....	....	....	....	....	×	×	×	....
Scranton	....	....	....	....	....	....	....	×	....	....	....	....	....	....	....	×[3]	....	....	....	....	....	....	....	×	×	....	....
South Carolina:																											
Charleston	....	2	....	....	....	....	....	....	1	1	....	....	....	....	....	1	....	....	....	....	....	....	....	×	×	....	....
South Dakota:																											
Aberdeen	2	2	....	....	....	....	....	1	....	....	....	....	....	1	....	....	2	....	....	....	....	1	....	×	×	×	....
Lead	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	5	....	....	....	....	....	....	....	....	....	....	....
Texas:																											
Austin	....	×	....	....	....	....	....	....	....	×	....	....	....	....	....	×	×	....	....	....	....	....	....	×	×	....	....
Washington:																											
Aberdeen	....	....	×	....	....	....	....	×	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	×	×	....	....
Everett	....	....	×	....	....	....	....	×	×	....	....	....	....	....	....	×	3	....	....	....	....	....	....	×	....	....	....
Hoquiam	....	....	....	....	....	....	....	×	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	×	×	....	....
West Virginia:																											
Wheeling[4]	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	×	....	....	....	....	....	....	....	×	×	....	....
Philippine Islands:																											
Manila	(5)	....	....	3	5	....	....	....	....	....	....	....	....	....	....	....	....	....	....	(5)	....	....	....	×	....	....	....

[1] Temporary volunteer work.
[2] Above the fourth grade promotions are made by subject.
[3] In cooperation with Y. M. C. A.
[4] School nurse also.
[5] Sent to reformatory for boys at Solomboy, Bulacan.

TABLE II.—*Cities reporting progress.*

	Delinquent.	Backward.	Defective.	Blind or semiblind.	Deaf or semideaf.	Open air.	Foreigners, day.	Foreigners, night.	Vocational, day.	Vocational, night.	"Continuation."	Parental or residential.	Epileptic.	Late entering.	Gifted.	Vacation.	Special-help teachers.	Stammerers, stutterers, and lispers.	Crippled.	Incorrigible.	Mute (not deaf).	Home subnormal.	Ungraded schools.	Provision for— Medical inspection.	Physical examination for defects.	Dentalclinics.	Playground.
Alabama:																											
Birmingham			1							×	×																
California:																											
Berkeley										2																	
Oakland	3	2	5		1	1		4		2						1								×	×		
Santa Ana																							[1]1				
Watsonville						1																			×		
Colorado:																											
Boulder								×			1			×													
Pueblo	1							3																			
Trinidad																	×										
Connecticut:																											
Meriden		2					×	8			[2]2																
Middletown		1												×	×	1											1
New Britain						1										1											
New Haven						1	5	14								2	1			1						×	
New London	×	×	×																							×	
District of Columbia:																											
Washington																		×						×	×	×	[3]1
Georgia:																											
Atlanta					1	1		1																			
Illinois:																											
Aurora		1			1																						
Chicago						2																					
Decatur	1															8									×		
Evanston																×											
Harvey																	×										
La Salle									×								×									×	
Rock Island								×		×																	
Waukegan								[4]×																			
Indiana:																											
Anderson	×																									×	
Crawfordsville																×	×								×		
East Chicago		4						×	[5]×		×					[5]×										×	1
Goshen																								×	×	×	

[1] For Spanish-speaking children. [2] Evening continuation schools. [3] Recreation center. [4] In connection with Y. M. C. A. [5] School gardens and shops.

TABLE II.—*Cities reporting progress*—Continued.

	Delinquent.	Backward.	Defective.	Blind or semiblind.	Deaf or semideaf.	Open air.	Foreigners, day.	Foreigners, night.	Vocational, day.	Vocational, night.	"Continuation."	Parental or residential.	Epileptic.	Late entering.	Gifted.	Vacation.	Special-help teachers.	Stammerers, stutterers, and lispers.	Crippled.	Incorrigible.	Mute (not deaf).	Home subnormal.	Ungraded schools.	Provision for— Medical inspection.	Physical examination for defects.	Dentalclinics.	Playground.
Indiana—Continued.																											
Indianapolis						1																					
Kokomo																×	×										
Muncie	×	×	×						×		×					××										×	
South Bend		×																									
Valparaiso											×																
Iowa:																											
Davenport																	13							×			
Iowa City	×	×						3		6						7	×					×					
Ottumwa[1]																											
Kansas:																											
Horton																×											
Hutchinson		[2]×														4											
Junction City		×												×		×	2										
Parsons									2																		
Topeka																×											
Kentucky:																											
Louisville		×				1										[3]×	4										
Louisiana:																											
New Orleans[4]		2								1																×	
Maryland:																											
Baltimore			1							1		1				4	4		1							×	
Massachusetts:																											
Boston		80	35	1	1	14	1	19	2	1	1	1				14		3		1							
Brockton		2						4							×					1							
Concord		×													×												
Gardner			1				1	2		1							1								×		
Hudson and Lincoln																	1										
Lee	×	×	×																	×							
Methuen															×	1	1										
Milford		×						×									1										
Millbury		×															1										
New Bedford			×					5	1	5						3				2							
Northampton[5]																											
Northbridge								8								4											
Quincy									2	7							2										
Revere							×																				

Rockland	×	×	×											×		6												
Spencer																[6]×												
Springfield		2	1			4		2							4		1											
Stoneham		×															1											
Wakefield																	1											
Waltham																												1
Westboro																	1											
Westfield									10	3	3																	
Winchester		[7]×						10	×																			
Woburn		×														×												
Michigan:																												
Calumet		4	1					4	1							[8]×	10											
Detroit			3								×																	
Grand Rapids	×	×	1			2			×		×																	
Houghton																									×	×		
Ironwood		([5])	([5])																									
Jackson		×			1			1							×													
Kalamazoo		([6])	([6])			1		1	×							[9]×											×	
Ludington	×								×												×							
Muskegon			1			1		1		1						1												
Ypsilanti									×							1												
Minnesota:																												
Austin																	×					×						
Ely		×														1	1											
Eveleth									×							1												
Faribault			×					×		×							1											
Minneapolis	3		1			1	1												1									
Owatonna		×							×					×	×	×	[10]×											
Rochester									3	2																		
St. Paul	1	3	1		1	1		4	1	1	1			×		12	3			[11]×								
Winona								×														×			×			
Missouri:																												
St. Joseph																2									×	×	5	
St. Louis	1	([8])	([8])			×					×					×												
Sedalia																2											×	
Montana:																												
Great Falls		×																										
Missoula																×	4								×			
Nebraska:																												
Lincoln								3								5												
Omaha							×					×				×												
South Omaha																									×	×		
New Hampshire:																												
Claremont		×													×													
Concord		×						×									×											

[1] School nurses also.
[2] Vacation classes for pupils of grades 3–8 who had failed of promotion.
[3] Summer high school, 6 weeks.
[4] An investigation of exceptional children was made by the board of education in cooperation with Tulane University and the public school alliance.
[5] School nurse.
[6] Cooking and sewing.
[7] In high school.
[8] Summer high school.
[9] Swimming pool.
[10] Principals give half time to backward pupils.
[11] Farm.

TABLE II.—*Cities reporting progress*—Continued.

	Delinquent.	Backward.	Defective.	Blind or semiblind.	Deaf or semideaf.	Open air.	Foreigners, day.	Foreigners, night.	Vocational, day.	Vocational, night.	"Continuation."	Parental or residential.	Epileptic.	Late entering.	Gifted.	Vacation.	Special-help teachers.	Stammerers, stutterers, and lispers.	Crippled.	Incorrigible.	Mute (not deaf).	Home subnormal.	Ungraded schools.	Provision for—			
																								Medical inspection.	Physical examination for defects.	Dental clinics.	Playground.
New Jersey:																											
Atlantic City			5						1							×	11										
Bayonne							1	2								×											
Elizabeth			2																								
Jersey City				1	1				[1]2	[1]2						3											
Montclair	1	4	1			1		5		×							6			×							
Newark		2	2		2		1			1									1								
Orange		×	2			1			2	4					×		6			1							
Passaic				(2)				46			1					×	6										
Paterson			4													1	2			1							
Perth Amboy			1					15																			
Plainfield						1		×								×										×	
Princeton		1	1							1																	
Ridgewood		1								2				×			3										
South Orange																	2										
Summit		×	2																								
Trenton																	2			×							
Vineland		1																									
West New York		(1)																									
New York:																											
Dunkirk		(1)																						×	×		
Elmira										2																	
Mamaroneck		(1)																								×	
Mount Vernon	1		1														3										
Rochester	×	×	×			5	×	×	×	×				1			1	1		2		5			×	×	
Schenectady		7	2			2			1							2									×	
Syracuse	1					1	5	15	26	10						13	5			×							
Watertown	[1]×		[1]×		[1]×											×											
North Carolina:																											
Goldsboro		1	1																							×	
Winston-Salem		1				1								35	×												
North Dakota:																											
Fargo																	×										
Ohio:																											
Cincinnati	1		1			2			4						2	10		[2]1									
Coshocton	6	6	1			1							1	×	20	1	2							×	×	×	
Elyria									×	×																×	
Youngstown																×											

Pennsylvania:																												
Chester		1					[3] 2	1																				
Easton		[4] ×	1			1	×	×	3																			
Erie	1	2	1			1		1							3										×	×		
Harrisburg		(1)		[5] ×	[5] ×					1					[5] ×													
Lancaster																												
Nanticoke		[6] ×														[6] ×												
New Castle		10																										×
Philadelphia	1	46	1			2	2	60	18	42			(7)	(7)	×	×	3											
Pittsburgh		×																										
Punxsutawney																												
Reading									1											1								
Warren																	2											
Wilkes-Barre								1		2						11											×	
Williamsport						1		1		2					2										×	×	×	
Wilmerding	1	1						6							1	1											×	
Rhode Island:																												
Bristol			×												×											×		
Central Falls																											×	
South Dakota:																												
Sioux Falls																									×	×		
Tennessee:																												
Chattanooga		×							×				(7)	(7)	[8] ×													
Memphis		[9] ×						×	×					[9] ×														
Virginia:																												
Portsmouth														×	[8] ×													
Richmond		3	1			1				1					25											×		
Utah:																												
Salt Lake City									×	×	×	×										×						
Washington:																												
Spokane		(2)						[10] 8							[10] ×	×												
Tacoma		5				1						1																
West Virginia:																												
Parkersburg		1													8	2												
Wisconsin:																												
Beloit		×							×																			
Madison		2			1		1	1		1					3											×		
Milwaukee		4	3	2		1		40	1		1						2											
Rhinelander															[11] ×													
Sheboygan		2								×					1	2												
Superior			1		1			7	4	8	10					4					1							
Wausau								1	×	×	×				×													

[1] Sent to State institutions.
[2] One itinerating teacher for 150 pupils.
[3] For non-English-speaking children.
[4] Normal pupils dismissed 30 minutes early and time given to backward.
[5] All in one class.
[6] Vacation, 6 weeks. Special classes reorganized and renamed.
[7] Ungraded.
[8] Pay vacation schools.
[9] Backward and advanced taught together.
[10] Summer vocational schools.
[11] High school and eighth grade.

TABLE III.—*Cities reporting for first time.*

	Cities.
North Atlantic Division	10
Maine	2
New Hampshire	1
Massachusetts	2
New Jersey	2
Pennsylvania	3
South Atlantic Division	3
West Virginia	1
North Carolina	1
South Carolina	1
South Central Division	3
Texas	1
Arkansas	1
Oklahoma	1
North Central Division	8
Ohio	2
Michigan	1
Minnesota	1
Iowa	1
South Dakota	2
Kansas	1
Western Division	11
California	4
Montana	1
Colorado	1
Nevada	1
Washington	3
Arizona	1
Manila, P. I.	1
Total	36

TABLE IV.—*Cities reporting progress.*

	Cities.
North Atlantic Division	74
New Hampshire	2
Massachusetts	24
Rhode Island	2
Connecticut	5
New York	8
New Jersey	18
Pennsylvania	15
South Atlantic Division	8
Maryland	1
District of Columbia	1
Virginia	2
West Virginia	1
North Carolina	2
Georgia	1
South Central Division	5
Kentucky	1
Tennessee	2
Alabama	1
Louisiana	1
North Central Division	63
Ohio	4
Indiana	9
Illinois	8
Michigan	10
Wisconsin	7
Minnesota	9
Iowa	3
Missouri	3
North Dakota	1
South Dakota	1
Nebraska	3
Kansas	5
Western Division	12
Montana	2
Colorado	3
Utah	1
Washington	2
California	4
Total	162

CHAPTER XXI.

PROGRESS IN THE EDUCATION OF THE DEAF.

By Edward Allen Fay,
Gallaudet College, Washington, D. C.

Contents.—New schools and their forms of organization—Schools for the deaf are educational, not charitable institutions—Freedom from political control—Compulsory education—School age—Smaller classes—Oral teaching and the combined system—Auricular instruction—Industrial training—Montessori training—Musical vibration—Higher education—The training of teachers.

NEW SCHOOLS AND THEIR FORMS OF ORGANIZATION.

Nine new schools for the deaf were opened in the United States during the year 1912–13. Two of these—the Arizona school, which is a department of the University of Arizona, and the Austine Institution, an endowed school at Brattleboro, Vt.—are public residential schools, providing free education for all the deaf in their respective States and deriving their support wholly or in part from State appropriations. Every State in the Union now has one or more schools of this class except Delaware, New Hampshire, Nevada, and Wyoming. These four States do not, however, neglect their deaf children, but arrange for their education in other States. There are 64 public residential schools, which contained on November 10, 1912, 10,837 pupils, who constitute 82 per cent of all the deaf under instruction in the United States. These schools offer deaf children better care and supervision than the average home, exert a good influence out of school as well as during school hours, add to an academic education a thorough industrial training, impart moral and religious but not sectarian instruction, and at the end of the course send them out into the world upright, intelligent, self-supporting, wealth-producing citizens. Home ties during the school period are maintained by a long summer vacation.

Six of the new schools established during the year are public day schools. The number of day schools for the deaf in the United States (70) is now larger than that of the residential schools, but their pupils, numbering 1,773, constitute only 13 per cent of the whole number. In California, Michigan, and Wisconsin the day schools are supported by per capita appropriations from the State,

while classrooms are furnished and teachers are employed by the city or town in which the school is carried on; in the other States they are supported wholly by the city or town. The day school permits the deaf child to live at home, which as a rule is the right place for children, and insures him out of school hours an environment of hearing persons. These are real advantages where home conditions are favorable, but in many cases the influences of the home and of the street are such as to counteract the good influences of the school. The children, moreover, are exposed to accidents in going to and from school, their education suffers from irregularity of attendance, and except in large cities the schools are so small that proper grading and classification are impossible.

One of the schools opened during the past year is a private establishment. There are 20 private and denominational schools for the deaf in the United States, containing 583 pupils, which is 4 per cent of the whole number under instruction. They have the same reasons for existence as similar schools for hearing children; some of them offer more luxury and more individual attention than the public schools, and others insure the special kind of religious teaching and influence that the parents deem essential.

There has been a marked improvement in the status of schools for the deaf within recent years in two directions: First, in the recognition more generally accorded them as educational rather than charitable institutions; second, in their greater emancipation from political interference and control.

SCHOOLS FOR THE DEAF ARE EDUCATIONAL, NOT CHARITABLE INSTITUTIONS.

When the first schools for the deaf were established in this country nearly a hundred years ago, though their object was educational, they were regarded as charitable institutions. They owed their existence to the contributions of charitable individuals; they were modeled after the European schools, and at that time not only schools for the deaf, but all schools in Europe, except those for the wealthy, were charitable institutions. In America, however, the duty of the State to provide free schools for its children had already been recognized, and the supporters of the schools for the deaf were not slow to perceive that their pupils had the same right as other children to education at public expense. The justice of this claim was recognized and appropriations were made by the legislatures for this purpose, usually in the form of per capita payments to the incorporated schools which had been organized and endowed by benevolent individuals or societies. But the old idea of charity, under which the schools had been established, persisted for a long time, for it was fostered by the unfortunate names of "asylum" and "institution"—especially "asylum"—given to the early schools, and it was strength-

ened by the circumstance that the pupils received free board and lodging. In fact, in the eyes of the law the 19 incorporated schools for the deaf possessing some endowment funds—2 in Connecticut, 1 in the District of Columbia, 1 in Maryland, 3 in Massachusetts, 8 in New York, 3 in Pennsylvania, and 1 in Vermont—are charitable institutions from a legal point of view, as are all endowed schools, colleges, and universities. But the legal point of view is not the general point of view; our schools, colleges, and universities are educational in their purpose, and they are, therefore, universally regarded as educational institutions. So also ought our endowed schools for the deaf to be regarded, and more and more the public has come to understand that fact.

As to the 45 public residential schools for the deaf which have received no endowment from individuals but were established and have always been controlled by the State, there has never been any good reason for regarding them as anything but educational; but the old nomenclature and the old habit of mind derived from the endowed schools still prevailed when the earlier of these strictly State schools were established, and it is only slowly that they have taken their proper place in the estimation of the public within recent years. At the present time only two schools still bear the legal title of "asylum," and concerning one of these the legislature at its last session, in a statute providing for changes in its governing board, used the name "school for the deaf" throughout the statute; many formerly called "institutions" have had their titles changed to "schools"; legislatures are beginning to realize that they have no right to dispense charity, and that if the pupils receive food and shelter during the school term it is not as a charity, but as a necessary incident of their education. A recent inquiry shows that the following public residential schools are now classified as educational and not charitable institutions: The Alabama, American, Arizona, Austine, California, Colorado, Columbia, Florida, Idaho, Indiana, Iowa, Kansas, Kentucky, Louisiana, and Maine schools; the two schools in Maryland and the three schools in Massachusetts; the Minnesota, Mississippi, Montana, New Jersey, and New Mexico schools; the eight schools in New York; the North Carolina school at Raleigh; the Ohio school; the Oklahoma school at Sulphur; the Oregon, South Carolina, and Utah schools; the two schools in Virginia and the West Virginia school—in all 42 schools. In 1903 an inquiry similar to this was made. At that time the number reporting a purely educational classification was 21. We have, therefore, the gratifying intelligence that the number of public residential schools classified as educational and not charitable has just doubled within the past 10 years.

A majority of the 22 public residential schools for the deaf not named in the above list are legally entitled "schools," and to that

extent their educational character is recognized; but some of them are classified by law as "charitable," "eleemosynary," or "benevolent"; others are included with charitable and penal institutions in the acts making appropriations for their support; others are regarded as "semieducational and semicharitable"; and from two or three no information has been received. Two of the schools now reported as "charitable"—the Texas school and the North Carolina school at Morganton—will probably be transferred to the list of purely educational institutions during the coming year.

The 70 public day schools for the deaf are a part of the common-school system of the cities and towns where they exist. To them and to the 11 private schools that are not denominational in character the stigma of charity has never been attached.

FREEDOM FROM POLITICAL CONTROL.

The second gratifying progress in the status of public residential schools for the deaf is in the direction of freedom from political interference and control. The endowed schools of the East have never had any trouble whatever from this source, but there are few of the Western and Southern States that have not at some period of their career suffered from it more or less. Many of the schools for the deaf have been made the football of political parties; superintendents have been changed with every change of administration, and men have been appointed who had no training or experience as teachers of the deaf. In one school two decades ago the superintendent was changed, for no other than political reasons, four times within five years.

At the present time 50 of the 64 public residential schools seem to be definitely on a nonpartisan basis. They are the schools in Alabama, Colorado, Connecticut, District of Columbia, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Vermont, Virginia, and Wisconsin. In Ohio and Indiana nonpartisan government is now insured by very strict laws.

Fourteen schools are not named in the above list, but it can not be said of all or even most of them that they are suffering at present from political interference or control. In some of them politics enters into the appointment of the governing board only, and not always there; but where it does or can enter there is always the possibility that it may easily be made to enter into the appointment of the superintendent and other officers also. In others of these schools politics affects the position of superintendent and in one school the positions

of steward, matron, and physician. Concerning three schools no information has been received.

COMPULSORY EDUCATION.

The education of the deaf is even more essential to the welfare of the individual and the community than the education of those who hear. But from mistaken motives of affection, from ignorance of the possibilities and the advantages of education, and sometimes for the sake of pecuniary gain many parents of deaf children allow them to grow up in ignorance or withdraw them from school before their education is completed. Perhaps the greater offense of the two is the withdrawal of children from school when they have learned enough to render efficient help at home or to earn wages in shop or factory, but not enough to prepare them properly for the duties of life. In one State that has an excellent school 34 per cent of the pupils who have entered during the past 25 years have dropped out without graduation or discharge. The percentage of withdrawals is probably equally large in most of the other States. A recent investigation by Dr. J. N. Tate, superintendent of the Minnesota School for the Deaf, shows that only 12 States at the present time have compulsory attendance laws for the deaf that are at all satisfactory, and most of these he regards as inadequate in some respects.

A good law was passed by the Legislature of Indiana at its last session. By this law the compulsory period for the school attendance of the deaf is made to extend over 12 years, from the age of 7 to 19. The State School for the Deaf is designated as the place of instruction.

> Any parent, guardian, or other person having charge of a child of school age not physically or mentally disqualified who refuses to send such child to school at any time during the compulsory years shall be fined from $1 to $25, to which may be added imprisonment in the county jail for from 2 to 90 days. Any parent, guardian, or other person having control of the child who shall permit its employment, and the person employing it, between the ages of 7 and 18 years (except during the summer vacation) without a certificate of discharge duly presented, is guilty of a misdemeanor and shall be fined from $10 to $50.

Provision is made for the traveling expenses of pupils, if the parents are in indigent circumstances; and severe penalties are imposed upon attendance officers for the neglect of their duties in relation to deaf children.

At the conference of superintendents and principals of American schools for the deaf, held at Indianapolis in the summer of 1913, a committee, of which Dr. Tate was made chairman, was appointed to collate the compulsory-education laws relating to the deaf in all the States and to frame a model law to be recommended for general adoption. A special meeting of the conference to consider and act

upon the report of this committee will be held in 1914 at Staunton, Va.

SCHOOL AGE.

There has been a strong tendency during the past few years to begin the instruction of deaf children at an earlier age than formerly. Instead of refusing them admission until they are 10 or 12 years old, many schools now receive them as young as 5 or 6, and some even at 3 or 4 years of age.

There are both advantages and disadvantages in this lowering of the age of admission. On one hand, deaf children have so much to learn, as compared with hearing children, that their education ought to be begun as early as possible; for oral teaching especially it is important that instruction begin not later than 5 years of age. On the other hand, there are obvious objections to taking children away from their homes—as in the great majority of cases it is necessary to do in order that they may receive proper instruction—while they are still very young.

The decision as to the proper school age for deaf children depends largely upon the circumstances of the individual and the facilities offered by the State in which he resides. Where the term of instruction afforded by the State is limited to six or seven years, and where children are surrounded by favorable influences at home, probably 10 or 12 is the best age for them to be sent to school, since experience has shown that the six or seven years following that age are those in which the most can be accomplished for their physical, mental, and moral development.

But where, as in some States, there is no limit to the term of instruction, where proper provision is made for the care and teaching of the little children by kindergarten or Montessori methods apart from the older pupils, and especially if the home influences are bad, it is desirable to receive them as young as 5 or 6 years of age or even younger. From 5 or 6 to 10 they will probably make less progress at school than from 10 to 14; but if, in addition to those four or five years under 10, they remain 6 or 7 years longer, as they now may in some States, they will be able to acquire a much fuller mastery of the language of their fellow men, to speak and to read the lips better, and to reach a far more advanced stage of education in all respects than if their education had not begun until the years of early childhood were passed.

SMALLER CLASSES.

The teaching of deaf children, especially teaching by the oral method, requires much individual work; it is essential therefore that the classes should be smaller than is usual in classes for hearing chil-

dren. In this respect there has been much improvement in American schools for the deaf within recent years. The size of classes has been gradually reduced from an average of 20 pupils in a class until in 1912 the average number in oral classes was 10, in manual classes 12. Ten or even twelve is not an excessive number for an advanced class if the pupils are well graded; but for the first two or three years in school the number of children in a class should not be more than 5 or 6. But few schools have yet reached this ideal limit in the size of beginning classes.

ORAL TEACHING AND THE COMBINED SYSTEM.

The teaching of speech has continued to grow in favor during the past year. Of 13,193 pupils under instruction in the United States on the 10th of November, 1912, 9,878, or 75 per cent, were taught speech; of these, 8,661, or 66 per cent, were taught wholly or chiefly by the oral method, while 179, or 1.36 per cent, were taught wholly or chiefly by the auricular method. When we remember that the first school for the teaching of speech—Miss Harriet B. Rogers's little school of three pupils at Chelmsford, Mass.—was opened only 47 years ago, and that at that time the entire body of American teachers of the deaf regarded oral teaching as a foolish waste of time, the progress shown by the above statistics is remarkable. It is due to the strong desire of the parents of deaf children that their children should speak, to the vigorous propaganda that has been carried on by the American Association to Promote the Teaching of Speech to the Deaf and other advocates of oral teaching, and to the open-mindedness of the heads of schools, but more than all else to the increased skill of teachers, and to the remarkable results that have actually been achieved through the constantly growing knowledge of the physiological basis of speech and the visible movements upon which speech reading depends.

The greater part of the oral teaching in America is not done in the exclusively oral schools, but in the schools following the combined system. Of the 9,878 pupils who had been taught speech on the 10th of November, 1912, 6,450, or 65 per cent, were in combined-system schools; of the 8,661 pupils taught wholly or chiefly by the oral method, 5,289, or 61 per cent, were in combined-system schools; of the 179 taught wholly or chiefly by the auricular method, 127, or 71 per cent, were in combined-system schools. The oral schools, which in the United States include all the day schools but 2, all the private schools but 1, and 12 of the 64 public residential schools, endeavor to educate all their pupils by the oral method. Some oralists claim that all deaf children who are capable of education by any method can be educated by the oral method, although it is conceded that

there may be a few who by reason of physical defect in their vocal or visual organs can not acquire intelligible speech or are unable to learn to read the lips. They admit that the success attained is very unsatisfactory in some cases, and many oralists favor the use of other means of instruction for children with whom only meager results can be achieved by the oral method. Thus Mr. F. W. Booth, superintendent of the Nebraska school, a prominent oralist, said in a paper read at the conference of superintendents and principals of American schools for the deaf held at Indianapolis in 1913:

> I am an oralist, but an oralist with no prejudice against the principles of the combined system where the system is applied to give really distinctive treatment and distinctive classes of pupils; where, in short, each and every pupil shall have intensive instruction through the one method fitted to give to him the best education of which he may be capable.

The combined-system schools, which include 52 of the 64 public residential schools, all the denominational schools and 2 day schools, endeavor to choose for each child the method best suited to his individual capacity. "Fit the method to the child, not the child to the method," is their motto. At the beginning of the course all the children are usually placed in oral classes; but after two or three years' trial those with whom the measure of success in speech and speech reading is slight are transferred to manual classes, and their education is carried on by manual methods, which include the use of signs, the manual alphabet, and writing.

The methods of instruction in the oral classes of combined-system schools are identical with those of the oral schools. But outside the schoolroom the language of signs and the manual alphabet are employed in chapel exercises and public addresses, for which, on account of the difficulty and uncertainty in reading the lips of a public speaker, they are better adapted than speech; they are also the usual means of communication employed by the children in talking with one another out of school. In the oral schools, while the children do use signs more or less in communicating with one another, this habit is repressed as far as possible by those in authority, and the endeavor is made to surround the pupils with an oral atmosphere out of school as well as in the schoolroom.

The free use of signs by deaf children has its advantages and its disadvantages. On one hand it quickens and broadens the understanding and conveys much general information at a period when the language of words is still unknown; it reaches the mind and heart even of the educated deaf as no other means can. On the other hand its convenience and facility lead the children to continue its use even after they have learned to speak and read the lips; they have little practice in oral communication outside the schoolroom; the language of signs, the vernacular of the congenital deaf-mute, which in the

combined-system schools has been highly developed as a means of communication, tends to become confirmed as their natural medium of thought and expression; speech and speech reading, though they may be mastered as a hearing student masters a foreign tongue, remain to them something strange, foreign, artificial, an adjunct of the schoolroom rather than a spontaneous instrument of human intercourse.

The best application of the principle of the combined system, affording the most scientific and most efficient means of instruction for the deaf, is probably to be found in Denmark. All the deaf children of that country are first sent to a preparatory and testing school at Fredericia. At the end of the year there is a sifting out of those who have considerable hearing, constituting 28.4 per cent of the whole number. These are removed to a school at Nyborg and are taught orally. Thus only the totally (or almost totally) deaf are left at Fredericia, and at the end of the second year these are divided into three classes, called "A," "B," and "C" classes. The A children are the totally deaf of bright intellect, constituting 25 per cent of the whole number of the deaf. They are taught orally at Fredericia, in a school that is separate and distinct from the preparatory school above mentioned. The B children are the totally deaf of medium mental capacity, constituting 19 per cent. They remain in the preparatory school and are taught orally. The C children are the totally deaf who are mentally dull, constituting 27.6 per cent. They are removed to a school in Copenhagen and are taught manually. In the larger American schools, some of which contain each more pupils than all the schools of Denmark put together, it might be desirable to carry the Danish system of classification still further, forming an additional class of "semi-mute" children—those who have acquired verbal language in the natural way through the ear before hearing was lost—to be taught orally. Thus each class of the deaf would receive the kind of instruction by which it could profit most and each method would do its work to the best advantage. Dr. James Kerr Love, an aural surgeon of Glasgow, who has made a careful study of the education of the deaf in the various countries of Europe and America, says the ideal system would consist of "a combination of the Danish classification with American thoroughness."

While teachers of the deaf still differ concerning methods of instruction, the bitterness of feeling on the subject that formerly prevailed has passed away. The adherents of either method now acknowledge that excellent work is done by the other. In a recent article in the American Annals of the Deaf, Miss Sarah Harvey Porter, a prominent advocate of the combined system, while declaring her "strong belief in the judicious use of signs in the class-

room and in their free use outside," admitted that "a good oral school will forever be able to show better lip reading than any combined-system school can produce." On the other hand, Dr. A. L. E. Crouter, superintendent of the Pennsylvania Institution—the largest and one of the best oral schools in the world—and long president of the American Association to Promote the Teaching of Speech to the Deaf, said at the last convention of American instructors of the deaf:

> We freely concede that great good has resulted and will continue to result to the deaf from the honest and sincere application of methods that are not oral and heartily rejoice in their success.

If any bitterness of feeling still remains on the part of the educated deaf, the great majority of whom, by whatever method they have been instructed, are ardent supporters of the combined system, it is not because they are opposed to oral teaching, for they are not, but because they can not bear to see deaf children deprived of the language of signs, from which they themselves have derived so much pleasure and profit and which they appreciate as no hearing person can. Their attitude is shown by the following resolutions adopted by the National Association of the Deaf at a largely attended convention held at Colorado Springs in 1910 and reiterated at their convention in Cleveland in 1913:

> Whereas the sign language, as introduced in America by Clerc and developed by Gallaudet and other early educators of the deaf, is a most beautiful language, of priceless value to the deaf;
>
> *Resolved*, That any policy of education which tends to impair or destroy or restrict the use of this beautiful language is opposed to the best interests of the deaf;
>
> *Resolved*, That we call upon schools for the deaf not only to preserve, but to improve this sign language, and to give systematic instruction in the proper and correct use thereof.
>
> Whereas, while we fully recognize and appreciate the value of speech to the deaf, we also recognize the difficulty and even the impossibility of acquiring it by many of the deaf;
>
> *Resolved*, That we favor the best oral instruction for those deaf who can profit by it.
>
> *Resolved*, That where the attempt to acquire speech results in the sacrifice of mental development, we favor the employment of such methods as will secure the highest mental development.
>
> That is what the combined system aims to do, and therefore we indorse the combined system.
>
> Whereas speech reading is practicable only for individual conversation, and does not enable the deaf to understand sermons, lectures, debates, and the like; and
>
> Whereas the sign language offers the only practicable and satisfactory means by which the deaf may understand sermons and lectures, participate in debates and discussion, and enjoy mental recreation and culture;
>
> *Resolved*, That it is the sense of this convention that all the deaf, including those taught by the oral method, should have the privilege of using the sign language while at school.

AURICULAR INSTRUCTION.

Few persons are totally deaf, and in nearly all the schools for the deaf there are some pupils with a considerable residuum of hearing. In some schools such pupils are trained by special teachers who endeavor to educate and, by education, develop the existing hearing power so that during the latter part of the course the ear may be made the principal means of receiving instruction and the pupils may be graduated as hard-of-hearing rather than deaf persons. In other schools the same end is sought, but with less success, by means of such special training as can be given in connection with other teaching.

Not all the pupils in American schools for the deaf who possess sufficient hearing are taught through the hearing, partly on account of the expense involved in the employment of special teachers and the impossibility of giving the requisite time in connection with other teaching, and partly because many heads of schools regard the development of imperfect hearing as less valuable on the whole than the acquisition of good lip reading, and they deem it best to concentrate all the attention upon the latter. The proportion of pupils taught wholly or chiefly by the auricular method, however, while fluctuating somewhat from year to year, tends gradually to increase. It has risen from 0.58 per cent in 1902 to 1.36 per cent in 1912.

INDUSTRIAL TRAINING.

American teachers of the deaf in residential schools have always attached great importance to industrial training. By this is meant not merely manual training, such as has been introduced within recent years into the common schools, but also what is now called vocational training. As Dr. Francis D. Clarke said at the conference of superintendents and principals held at Indianapolis in 1913:

> The first trades school ever established in America was established in 1823 at what was then the American Asylum for the Deaf and Dumb (now the American School for the Deaf, at Hartford), and for years the schools for the deaf were the only schools that made any effort to teach trades to their pupils.

The aim of this industrial training is to give every pupil, pari passu with the education acquired in the schoolroom, the mastery of some trade by which he may secure independent self-support immediately after graduation. This ideal is not attained in all the schools, but in the best residential schools it is. In those that fall short of it through insufficient pecuniary resources, the pupils at least form habits of industry, learn the use of tools, and acquire the rudiments of a trade. The discipline of the shop is everywhere regarded as no less valuable and important than that of the schoolroom. To it may be attributed in large measure the general

independence, thrift, and success in life of the graduates of the residential schools. There are very few deaf beggars or paupers in America, and deaf people seldom "trade in their misfortune." In nine cases out of ten, persons who appeal to the sympathy of the public by exhibiting written or printed cards saying "I am deaf and dumb" are impostors, with unimpaired hearing and speech. It is not always easy for the average citizen to detect the fraud, but an educated deaf person or a teacher of the deaf can readily do so. At the present time the National Association of the Deaf is making a vigorous effort to put a stop to these impositions, which bring upon the deaf a discredit that is wholly unmerited.

More than 70 different industries are taught in American schools for the deaf. The occupations generally regarded as most desirable and which therefore occupy leading places in the curriculum of the schools are, for the boys, farming (including dairying, gardening, and poultry raising), carpentry and cabinetmaking, shoemaking and repairing, printing, tailoring, baking, painting and glazing, masonry, chair caning, weaving, barbering, and blacksmithing; for the girls, cooking, housework, sewing and mending, dressmaking, embroidery, and millinery. Local conditions lead to the introduction of other industries. The deaf do not always follow the occupations they have learned in school, but where proper care has been exercised in choosing the occupation to be taught, and where the pupil has been so thoroughly trained that he has become a master of his trade, he usually follows it after graduation. In the cases where he does not, the habits of industry he has formed and the practice he has had in the use of tools enable him to take up a new occupation with comparative ease.

The proper division of the day's work between general education and industrial training is a subject that has been much discussed by the heads of schools for the deaf. In most of the schools five hours are given to work in the schoolroom, with one or two hours of study in the evening, and two and a half or three hours are given to work in the shops. This arrangement, however, does not always allow a sufficient length of time to enable the pupil to become a master of a trade. In some schools, as the New York, Illinois, and Michigan schools, this difficulty is met by keeping the pupils, during the latter part of their course, in the shop for four hours and reducing the school hours to the same length; in other schools, as those of New Jersey and Indiana, postgraduate industrial courses are provided to which former pupils are admitted and where they are given additional training in the shops for eight hours a day. Where the circumstances of the school are such as to render a postgraduate course feasible, this plan seems preferable to that of abridging the school hours during the undergraduate term of instruction;

for deaf pupils as a rule need for their proper mental development five hours a day in the schoolroom.

MONTESSORI TRAINING.

Teachers of the deaf were among the first to greet the Montessori method when it was brought to the attention of the American public two years ago. Believing that it might prove helpful in the education of deaf children, several of them went to Rome last year and studied the method at first hand in Dr. Montessori's training class during the winter of 1912–13. Two of them—Mrs. A. Reno Margulies, of New York, who was Dr. Montessori's assistant in organizing the training school in Rome, and Mrs. J. Scott Anderson, of Philadelphia—on their return to America introduced the method into their private schools and established Montessori training classes for teachers. Mrs. Edwin G. Hurd, wife of the principal of the Rhode Island Institute for the Deaf and head teacher of that school, was the first actually to apply the Montessori method to the education of the deaf. In January, 1913, she began training by this method eight little deaf children from 3½ to 5 years of age.

Dr. Montessori, in her *Metodo della Pedagogia Scientifica*, acknowledges her great indebtedness to Dr. Séguin and Dr. Itard, who was Dr. Séguin's instructor. Dr. Itard was the resident physician of the National Institution for the Deaf in Paris from 1800 to 1838, and there made experiments in the education of deaf children, taught "the wild boy of Aveyron," and established the "classe d'instruction complémentaire," which later gave an impetus to the formation of the "high classes" in American schools for the deaf. Much of the Montessori didactic material for the training of the senses has long been in use in schools for the deaf, and when the method was first acclaimed in the American magazines it was asserted by some teachers of the deaf that there was nothing in it that was new to them. Now, however, that the method has been more profoundly studied, it has become evident that the sense-training material and the technique, to which so much prominence was given in the magazine articles, by no means constitute the whole of the method. In applying the principles of modern psychology to the education of little children, Dr. Montessori has shown better than any of her predecessors the natural order in which subjects of study should be introduced, and has taught us how to train our children from the beginning in habits of self-control and respect for the rights of others; she has shown us how to develop their initiative, strengthen their will power, and broaden the field of their mental activity.

Mrs. Hurd's experiments in the application of the Montessori method to the education of little deaf children have already been

carried far enough to prove that these children respond to the treatment as eagerly as hearing children and that the effect upon their mental and moral development is equally satisfactory. If it should be objected that the amount of language they acquired—the element of first importance in the education of the deaf—was less than that of deaf children who have been under instruction by other methods for the same length of time ,it should be remembered that they were younger than the usual age of admission into schools for the deaf. It is reasonable to expect that after two years of Montessori training they will be able to make more rapid progress in language and other subjects than pupils of the same age who have not had the benefit of that training.

MUSICAL VIBRATIONS.

The idea of musical training for the deaf seems absurd at first thought, but experience has shown that it is not only possible, but useful. Mr. Enoch Henry Currier, principal of the New York Institution, who has given much study and experiment to this subject, said at the conference of superintendents and principals held last summer (1913) that he regarded music as a more important factor in the education of deaf children than of hearing children.

Mr. Currier's attention was first attracted to the possibility of musical training for the deaf by observing that the children in his school liked to beat against a wall or other solid with a club. "A boy would stand and pound by the half-hour on a brick wall. It was not done once or twice, but was an habitual practice." Inquiring of the children why they did that, he was told that the resultant sensations "gave pleasure and enlivened the body." He concluded that music might be used to advantage in stimulating the deaf to greater activity.

First he introduced the drum as an aid to the military drill, for the New York Institution has been organized upon a military basis for many years, and its pupils have attained a high degree of excellence in drill. He found that the marching and manual of arms improved very much when the drummer was "hurling sound waves against the battalion." Next he added fifes and then bugles, until now he has a trained band of between 40 and 50 members composed entirely of pupils of the school. In the band are 16 pieces—5 B-flat cornets, 3 E-flat alto horns, 1 B-flat tenor, 1 B-flat baritone, 2 E-flat basses, 1 trombone, 1 snare drum, 1 pair of cymbals, and 1 bass drum. The repertoire includes 185 selections. The execution of the band is so good that it is often invited to participate in high-grade concerts given by hearing musicians in New York City.

The pupils in the New York school "rise in the morning to the call of fife and drum; led by the band they march to their meals and to school in perfect step and time." When the band plays they crowd

around it just as hearing persons assemble around a body of musical performers. They do not *hear* the music in the ordinary meaning of the word; they receive no more sensation through the auditory apparatus than through other parts of the body; but, as Mr. Currier says, their entire system responds to the series of harmonious sound waves. He finds that, as the effect of the sound waves—

> the minds of the pupils become more alert; they become more ready to take initiative action; they get out from that dormancy which is peculiar to any person who lacks the stirring up that comes from the hurling of sound waves against him.

In some other schools for the deaf the piano is used as an aid in teaching speech. With their hands resting upon the piano, the pupils note the length of vibrations when chords are struck, the volume of tone, and, to a certain degree, the relative pitch. Mrs. Sarah A. Jordan Monro, a successful trainer of teachers of the deaf in Boston, regards the piano as—

> very valuable in leading deaf pupils so to concentrate thought upon vibrations and their meaning that the organs of speech are left as free as those of hearing children, and are thus in a condition for a natural use. Unfettered muscles and their unconscious freedom of action thus give to speech the beauty of definiteness without force and fluency without laxity.

Under the leadership of Miss Sarah Harvey Porter, an instructor in the normal department of Gallaudet College, a society of teachers of the deaf was formed last year for the study of the psychological effect of musical vibrations upon the deaf. Miss Porter has an interesting article on this subject in the American Annals of the Deaf for March, 1912.

HIGHER EDUCATION.

The progress in the higher education of the deaf during the past year has consisted especially in the broadening of the work of Gallaudet College, a department of the Columbia Institution at Washington, D. C., maintained by the Government of the United States, which offers the opportunity of higher education to the deaf. In addition to its courses in ancient and modern languages, mathematics, history, and philosophy, which formerly held the leading place in the curriculum, the college now offers courses in electricity, chemistry, dairying, and stock raising for young men and in library work for young women.

Hitherto the graduates of the college have engaged in teaching more largely than in any other occupation, though there have also been among them clergymen, architects, artists, editors, civil-service employees, and representatives of many other employments of a high grade. The new courses will give them special preparation for departments of useful work in which deafness is not a handicap, and

in which some graduates of the college have already achieved success, though they have not had the advantages of special preparation that are now offered.

THE TRAINING OF TEACHERS.

The training of teachers of the deaf is a problem that has not yet been wholly solved. It is essential that such teachers should possess all the qualifications of the best common-school teachers, that they should have an equally good general preparation, and in addition that they should have a special course of training covering a period of at least one year; two years is preferable.

To meet this need in part, and especially with a view to raising the standard of men entering the profession, Gallaudet College since 1891 has offered normal fellowships to hearing young men who are college graduates. It has also admitted a few young women, mostly college graduates, to its training class. Some excellent teachers have thus been brought into the work and they are now filling prominent positions in the schools; but it is difficult to induce men of proper qualifications to take the course, since the pecuniary compensation of instructors of the deaf is generally so small that capable young men with a college education find other lines of work more attractive.

Many young women are desirous to become teachers of the deaf, but even if Gallaudet College were willing to take them instead of young men the limited number that it could receive would be insufficient to supply the needs of the country.

The Clarke School, at Northampton, Mass., has a training class of high character which is supported in part by the American Association to Promote the Teaching of Speech to the Deaf; it also maintains a summer school for teachers, which has done much to raise the standard of instruction. Several other schools for the deaf, both public and private, have training classes in connection with their regular work; the course offered at the Indiana school, which covers a period of two years, is one of the best. By these classes in the various schools many good teachers have been trained within recent years, but the supply is still inadequate.

A new departure in training teachers of the deaf is about to be undertaken in Wisconsin. The legislature of that State, at its session of 1913, passed a bill providing for the training of teachers of the deaf at the Milwaukee State Normal School. Students in this department will receive instruction in methods of teaching the deaf in addition to their regular normal training, and their certificates will be countersigned so as to permit them to teach either deaf or hearing children in the schools of the State.

One reason, perhaps the principal reason, for the present insufficient supply of competent teachers of the deaf is the inadequacy of the compensation generally offered. The work is arduous, it requires superior ability, and demands special training; the salaries paid, therefore, ought to be larger than they are in the common schools. As a matter of fact they are not; probably in the past they have not been quite as large as in the best common schools. There has, however, recently been gratifying improvement in this direction; the salaries paid in the State schools for the deaf have been increased, on an average, 25 per cent within the past five years.

CHAPTER XXII.

PROGRESS OF THE EDUCATION OF THE BLIND IN THE UNITED STATES IN THE YEAR 1912–13.

By Edward E. Allen,

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Contents.—Evidences of progress—The work of field agents—New buildings and equipment—Vocational training—New activities in progressive institutions—Day schools for blind children—New publications—New plant of the Perkins Institution.

EVIDENCES OF PROGRESS.

The progress of the education of the blind in the United States is encouraging; for the year 1912–13 it is particularly so. While the campaign for preventing unnecessary blindness in children has grown in strength and persistence, and attention to the needs of the adult blind has become more effective, public opinion has caused a larger proportion of the blind children to go to school and has begun to meet the special needs of "defective eyesight" cases; curricula have been enriched and made more practical, and the scope of the schools has been further extended into the lives and careers of their graduates. The superintendents, teachers, and workers have united in large and enthusiastic biennial and triennial conventions; their former differences are disappearing; in short, progress has been noticeable all along the line.

The old idea that we shall always have the blind with us has given way to the saner conviction that there are altogether too many of them; in other words, that a large proportion are needlessly blind, and that this fact is a public responsibility, as well as a disgrace to civilization. An increasing number of oculists are gathering data, and they and other writers are publishing disagreeable and startling facts. But recently public opinion has been influenced mainly through the persistent activities of associations and commissions for the blind. These have not only published the truth far and wide, through lectures, literature, charts of startling significance, moving-picture shows, and the like, but they have also caused laws tending to the prevention of blindness to be enacted in one State after another, and they have improved existing laws. They have haled before the court and reprimanded or fined a few negligent midwives

and even physicians. And they have aroused boards of health and the medical profession generally. The latest proof of progress is the invitation to the field agent for the conservation of eyesight of the Massachusetts Commission for the Blind to present a paper before the American Medical Association at its session in Minneapolis in June, 1913. He accepted, his paper being entitled "Preventable Blindness; a Challenge to the Profession." This paper has appeared both in the journal of the association and in the form of reprints for general distribution to physicians, social workers, nurses, etc.

The schools for the blind also have helped in the campaign of enlightenment by furnishing statistics of the causes of blindness of their pupils. But in order to insure future help of this kind the American Association of Instructors of the Blind voted in 1910 to recommend to its membership the keeping of uniform records, and in 1912 the association supplied a form of uniform record card.

THE WORK OF FIELD AGENTS.

While many children have been saved from blindness through the increased effectiveness of the law and the special agencies for "follow-up" work, still the attendance upon schools for the blind has constantly grown. In 1912 it was 4,821, the largest it has ever been. Compulsory attendance laws have not brought about this growth, for as yet such laws, while often including the blind, actually affect them but little, save in a few places. The real causes of the increase are twofold: First, the employment by one institution after another of a field officer to search out the blind in their homes and to persuade the parents to send them to school; and, second, the increase in number, size, and efficiency of day-school centers for the blind in the public-school systems of certain cities. While a few southern institutions have long increased their pupil attendance through personal visitation, the superintendents usually traveling about for the purpose in the summer vacations, it is only within the past decade that the field-officer idea has spread over the country. Most of the institutions' annual or biennial reports for 1911 or 1912 either tell of having such an agent or emphasize the need of one. The conviction prevails, therefore, and is yearly gaining ground, that it is not enough to create the schools, but that it is a duty to bring the pupils to them; that, lacking any other agency, the school itself must do it. In the cities above referred to, special visitors employed by commissions or associations, or teachers have gone to the homes of blind children and have usually been able to cause them to attend the local day school or to secure their admittance to the State institution.

NEW BUILDINGS AND EQUIPMENT.

The institutions for the blind have collectively spent for buildings and lasting improvements nearly a quarter of a million dollars ($248,932) in the school year 1911–12, but the amount spent by one institution was $221,403, and a comparatively small sum was so expended by the others. It is known, however, that during 1912–13 much more than this was put into buildings alone; for, besides the fact that one, the Perkins Institution, had then finished the many buildings of its new plant, several have preferred to add one or more separate buildings rather than to enlarge existing structures. This is in accordance with the prevailing conviction that the segregate system of housing is superior to the congregate.

The only new school for the blind opened in 1912 is the Austine Institution for the Deaf and the Blind at Brattleboro, Vt. While the establishment of a new school indicates progress, the experience of the profession is against educating both the deaf and the blind under one roof; or, indeed, within the same grounds. The two classes and their interests clash to such an extent that, as soon as economic conditions permit, they should be put into separate schools.

VOCATIONAL TRAINING.

Among the schools for the blind enumerated in the 1911–12 Report of the Commissioner of Education are three schools of trades. These represent one of the phases of the recent movement for the purely vocational instruction and employment of those blind who are above school age. About three-fourths of all the blind in any community are over 21 years of age, and this is an important movement alike in its effect on the serious problem of the adult blind and on the education of blind boys and girls, increasing the emphasis laid on manual and vocational teaching in the schools. Other phases, similar in purpose, are carried on and extended by private associations and State commissions. These organizations labor alike for the conservation of vision and for the alleviation of the lot of those who have lost sight, their chief means to the latter being the provision of opportunities for employment which shall be partly or wholly self-sustaining. The executive secretary of the Ohio commission for the blind writes:

> Emphatically the two phases which have been developed in Ohio that are of most importance are home teaching with the industrial employment feature and the development of nursing service in the care of sore eyes. During the past year (1912–13) we have been giving employment to over 250 workers at their homes, and the work is proving to be very helpful.

A necessary part is instruction in handicraft, with provision for the manufacture at home or in small shops of goods for which the

commission also provides a market or which it sells. Another part is the important one of acquainting the public with what is going on by means of public and private lectures, working exhibitions at State fairs, advertising, and circularizing. Publicity work of the right kind is vital in helping to solve the problem, for it helps to create the market without which it were mere charity to employ the blind. The social-service movement which is now so widespread thus embraces the blind as handicapped citizens. The Minnesota School for the Blind in 1911 was the first to extend its service to the blind who are beyond the usual age of its pupils by opening a summer school to a limited number of men. It did the same in 1912 and 1913.

Most of the superintendents who are now appointed over the schools are chosen because of fitness rathe than, as formerly, because of political creed. Changes are still too frequent; but it is pleasant and encouraging to find that the new man is often primarily an educator. The profession is thus filling up with alert young men who understand the demands of the time and strive to meet them.

The schools, while still emphasizing the purely cultural studies, as they should do, yet carefully balance these with the vocational; and, instead of turning the graduate out to shift for himself as best he may, more and more of them are helping him to secure work. One institution, that in Philadelphia, undertakes to provide continuation schooling for a considerable number of pupils in the vocational or professional schools of the city and State. Another provides a normal course for its advanced music students, having as pupils boys and girls who can see—the kind of pupils the blind teachers must depend upon for their living in order to succeed. Business courses, including commercial arithmetic, bookkeeping, typewriting, salesmanship, are now to be found in the curricula of many of the schools. One school has recently introduced cobbling, another metal working, three or four gardening with vocational aspect. The "Outdoor Employment," pictured in the last report of the Connecticut Institute at Hartford, is unique. At least seven schools are teaching poultry keeping in a simple way; in one case, the institution at Pittsburgh, the boys with their teacher constructed a first-class hen house. At a round-table meeting of instructors in piano tuning, held during the convention of 1912, the discussion showed it to be the duty of schools for the blind to include a course in the tuning and care of piano-players. Immediately four schools responded by doing so. Domestic science is taught in 10 or more institutions, no fewer than five of them requiring of their girls daily household duties. Household arts education has been defined as that form of vocational education which fits for nonwage-earning occupations connected with the household, and as such it is especially adapted to blind girls, most of whom are expected to fit themselves while at school for what they can

contribute to the home. In at least two residential schools, the beautiful new cottage school at Baltimore being the first, the boys also perform daily household tasks. This is required of all, chiefly because it is well for a child to feel himself paying something, if only a little, toward his board and schooling. In 1912, in the latest school to be rehabilitated, a domestic science cottage was added to the equipment, where every girl may have the opportunity to live for a time and to learn both the theory and the practice of household economy.

NEW ACTIVITIES IN PROGRESSIVE INSTITUTIONS.

All these things go hand in hand with the quickening influence of dancing, roller skating, shower baths, swimming pools, outdoor-play apparatus, supervised sports, competitive athletics, boy scouts, camp-fire girls, talks on personal hygiene, etc. Some of the institutions have recently introduced most of these activities—a few nearly all of them. Who shall say, then, that the institutions for the blind in 1912 are not in a healthful, hopeful, state? In 1912 and 1913 three expert observers made a tour taking in nearly half of them. They report a splendid spirit nearly everywhere, and unquestionably the most hopeful tone where most is done both in vocational guidance and in securing positions for pupils as they leave school. One school in particular, that at Philadelphia, now employs an agent for the sole purpose of placing the blind in remunerative work. His success is one of the most encouraging signs of the times in the education of the blind. As a direct result of his efforts in 1910–11 and a part of 1912, 63 blind people, most of them recent pupils of the school, earned $8,895.

DAY SCHOOLS FOR BLIND CHILDREN.

Nearly everybody in the profession is sympathetically interested in the comparatively new movement for teaching blind boys and girls in the public schools. Chicago began it in 1900, and by 1912–13 10 other cities followed. No less than 404 pupils are reported in attendance. They recite in the same classes with the seeing children of the school and, it is claimed, with mutual benefit. But their preparation is always made under the care and direction of special teachers. Where a city conducts several " centers " for blind children there is a supervisor who trains the special teachers, visits every grade in which a blind child recites, and sees to it that all the blind children have manual and physical training and some little music. The extra expense of this day school instruction of the blind is in some cases wholly met by the city; in others, partly by the State. The per capita cost is naturally less than that in the residential schools. The day school has the advantage over the residential school

that it does not disregard the home as a factor in the child's life nor remove him during growth from his natural environment, and it gathers in the children whose parents are unwilling to send them away from home. On the other hand, no public-school system can alone provide the balanced opportunities and the inspiration that come from nine months spent every year at a well-equipped institution. However, this may be, where there is a will there is a way. We read of splendid cooperation in 1912–13 between private associations and public schools for the blind, of the medical clinics provided by the New York association, of its gathering the children together week day mornings in summer for "vacation classes" and on Saturday mornings in term time for gymnastic games and calisthenics, for lessons in boy scouting and in the duties of camp-fire girls, for talks on personal hygiene, for music, for manual training and vocational training, in cooking, sloyd, basketry, rush seating, and the like. We hear of blind high-school boys in Milwaukee selling newspapers every evening from 4 o'clock to 6.30, "just like other boys," and of the success of graduate girls as masseuses. Supt. Pearse, of the Milwaukee public schools, traveled to Pittsburgh in the summer of 1912 to tell the American Association of Instructors of the Blind, in convention assembled, of how admirably the needs of blind children were met in his city public-schools system. No previous executive committee of the association had secured such a manifestation of cooperation.

In 1912, too, the "Department of Justice of the United States granted the various day schools for the blind their free quota of books from the American Printing House for the Blind." It is clear, then, both that these nonresidential schools for the blind have passed the experimental stage and that the movement for them is destined to grow broader and larger. Even in Germany the compulsory schooling law does not actually force the parent to send his blind child to an institution. But it is even more vital for the handicapped child to be educated than it is for the unhandicapped; so then, if all blind children are to be brought under schooling in the United States, must not more and more public schools be open to them? It would seem so. This means that residential and day schools will supplement each other, for both are necessary to accomplish the greatest good.

In 1912–13 the Boston school committee established a day school for children who see too little to remain in the regular grades and too much to progress normally in schools for the blind. Similar centers for myopic children have been successfully conducted in London for several years and would seem to be needed in most cities. This year the Massachusetts Legislature made appropriation for a study of the needs of all cases of defective eyesight.

The training of children under school age is carried on in four nurseries for blind babies, and a Minnesota law of 1913 authorizes provision for the care and education of blind infants. No attempt, however, at special provision for the feeble-minded blind children has yet been made in our country. Nor has systematic provision for the higher education of the blind been made. However, three States appear to have made it possible for blind students at some school of higher education to meet the expense of having a reader. Two of these, California and Ohio, have established such "reading scholarships" within the past year.

NEW PUBLICATIONS.

Books in embossed type are published by the American Printing House for the Blind, at Louisville, Ky., and by the printing departments of 12 residential and day schools, and by one denominational society. In 1912–13 the number of different books issued was 69. Every school which can afford it has its printing plant, and prints books, maps, examination papers, etc., as the school department requires. Five State libraries and 31 free public city libraries maintain departments of embossed books. These, with the 44 school libraries, furnish abundant instruction and relaxation to many thousands of readers. Eight periodicals in raised type are issued; the Matilda Ziegler Magazine alone issues 7,000 copies every month. In the year 1912–13 the circulation of books and periodicals from four libraries alone is known to have been 57,769. The mails carry such books free of postage. No country does more for readers who are blind.

Of the many systems of embossed types that have been devised to facilitate finger reading, it is pleasant to know that in but two do new books still appear in the United States. But even two is one too many. Still further encouragement comes from the fact that a so-called uniform type committee of blind people, appointed by the American Association of Workers for the Blind, has been diligently at work for several years, making tests at most of the schools and workshops of the country, and that in 1913 they made a report which, because of its evident fairness, has gained almost universal support. The year 1912–13 has thus seen substantial progress made toward the evolution of a best type for general adoption.

The work for the blind has had for the past seven years a splendid quarterly magazine, The Outlook for the Blind. This serves as an organ of intercommunication and of inspiration and is a means of uniting all activities for and by the blind. It makes the work less provincial by putting its readers in touch with the best things at home and abroad and by printing a complete list of valuable articles

and books on the subject; and it helps to keep that work in the public eye, for it has a considerable circulation among those who see.

NEW PLANT OF THE PERKINS INSTITUTION.

The academic year just closed has seen the completion of the new buildings of the Perkins Institution and the removal of that famous school into them. They comprise what is believed to be the most complete equipment for a residential school for the blind that exists, embodying, as they do, the ideas gathered during many years from most of the institutions and schools in this country and from some in Europe. Abroad all such schools are more or less hampered by lack of money. The theory on which this plant was reconstructed and a description of its features may be had from the following extract from the director's report for 1912:

It is wise alike for economic and eugenic reasons to educate blind boys and girls strictly apart at all times and places. To keep the two groups apart is wise for the reason also that the division breaks an unwieldy number into groups which may be handled. A further division into cottages is best because it effects the maximum of personal contact of the children and youth with selected adults. Making each cottage of boys or of girls a family is especially desirable and wholesome. The doing of daily chores by all pupils can be made to have a profound educational effect; besides, it is practical training for life. Some one has said that school is not merely preparation for life, it is life; that it should teach boys and girls, not subjects; and that one of the best means is to keep them busy and interested and full of responsibility. Officers and teachers should also have daily "duties," such as caring for their rooms, the chief object being to show to the pupils that housework is honorable and dignified and that its avoidance is not one of the results of education. But it is good also because it promotes the spirit of family interdependence.

Such division into cooperative family living is practical only where the children are old enough to be really helpful. Where they are not so, as in the lower school, the divisions may be by age as well as sex. Where they are so, as in the upper school, the element of age may be disregarded, the divisions being made to provide equally for the families. This has been the case in our girls' cottages since 1870.

The principle which the Perkins Institution is now able to emphasize throughout is that the test of education lies less in what one knows than in how one can adjust oneself to society; that, while it is easy to instruct the young blind, it is difficult to train them so as to hold their own in the world. A reason for this difficulty lies in the tendency of the seeing to underrate the capabilities of the blind; another, in the natural proneness of the blind to magnify this "prejudice of the seeing" and to minimize the influence of their own exertions in overcoming it. The Perkins Institution must be a living, working demonstration of the power of the young blind not only to do this, but also to appear and act like other people—really a continuous exhibition. To this end the best interdependent family living under reasonably good conditions is fundamental.

The following is a brief description of the Perkins Institution, at Watertown:

THE NEW PERKINS INSTITUTION AT WATERTOWN, MASS.

Site.—It is 5½ miles from Boston city hall; 3 miles from Harvard University; within 6 miles of four other colleges; easily accessible by steam or trolley; within 10 minutes' walk of a flourishing village center and several churches.

Fronts for 1,600 feet on the north side of the Charles River Basin and the Metropolitan Park System.

Has 34 acres of land, an old estate, diversified with shade trees, orchards, gardens, playgrounds, and a pond.

Buildings.—The conditions offered gave the architect an excellent opportunity to satisfy requirements of health, practicalness, and æsthetic grouping.

Character of buildings.—Fireproof, low, narrow, yet relieved with gables and bays, affording maximum of light and air. Practically all living and sleeping rooms have southern exposure. Brick, with slate roof; Tudor Gothic style; wholesomely simple and yet beautiful in lines and coloring. Cartouches significant in the history of education of the blind are introduced. There is a lofty central tower and belfry.

Grouping.—Two main divisions, a lower and an upper school, each complete and independent, except for a common tunnel connection with power house and service building.

1. Lower school (2 kindergartens and 2 primary schools): Four independent families, each with its own dining room, kitchen, play cloisters, etc., and with its own set of classrooms—all under one roof, inclosing a great court, 155 by 120 feet. Each family has its own matron and teachers.

2. Upper school: Nine cottages in two groups, separated by the main, or school and administration, building. Four families and a domestic-science house for the girls; four families for the boys.

Separate buildings are: A little hospital, containing four separate suites, each with its kitchenette; also dentist's and oculist's rooms. A power house and service building, containing boiler, generating, and refrigerating rooms, storerooms, bakery, laundry; kitchen, dining room, and quarters for 10 men; rooms for the Howe Memorial Press. Director's private residence.

The main building is constructed about two hollow squares, forming a girls' and a boys' quadrangle. The north and south axis building, between the courts, is a museum of teaching objects. In this axis are also an assembly room and a swimming pool, and across it, at the southern end, a gymnasium with roof rink. There is a great hall for public entertainment, dramatics, and dancing; an equally large library; ample rooms for music library, music teaching, and practice, and for piano tuning; and all the needed classrooms for girls' school and boys' school and for their manual training.

The cottages of the girls (like those of the boys) are under one roof and make three sides of a rectangular "close," 270 by 60 feet. From its center runs a 20-foot brick walk, connecting with the main building.

A cottage family is a unit and consists of a matron, 4 teachers, a helper who cooks, half the time of a second helper, and 20 girls or boys of grammar and high-school age. The house is complete, with kitchen, dining room, living room, shower bathrooms, etc. No dormitory, but the small room plan, every room having a sunny exposure.

All buildings are planned to be easily kept in order, as far as possible by the pupils themselves, the example being set by teachers and officers, all of whom personally care for their own rooms. The floors are mainly of battleship linoleum, cemented down and bounded by rounded or hospital base. Some floors are tiled, some are "Puritan." The dadoes are of painted burlap; the doors, flush panel; the windows, outward-opening casements. While everything

is simple, it is yet beautiful. The "institution aspect" is absent; instead there is the pleasant atmosphere of home, in which everyone has his part to perform.

Object of the Perkins Institution.—The training of blind boys and girls to live lives of happiness and efficiency, both in the institution and in the world. Hence it must be—

A. A laboratory in which there shall be plenty of hard work and play and the maximum of personal service from pupils and staff alike; and

B. A place attractive to all—first, to those who live and labor there, and, second, to visitors—to the public who must be the future employers of the graduates.

The new Perkins Institution was not built for more pupils, but for better service to all. Its location and the character of its buildings have put it in the public eye. Interested visitors and students of special education and social work are welcome at any time.

CHAPTER XXIII.

RECENT PROGRESS IN TRAINING DELINQUENT CHILDREN.

By George S. Addams.

Judge of Juvenile Court, Cleveland, Ohio.

Contents.—The first juvenile-court law—The increased scope of juvenile court work—Mothers' pension laws—The judge's personality is the essential consideration—The probation officer—State probation commissions—Detention homes—Court procedure—Institutions for delinquents—Relation of feeble-mindedness to delinquency—Examples of advanced legislation.

THE FIRST JUVENILE-COURT LAW.

The progress of the past year in the methods of dealing with wayward children has been a general approach toward recognized standards rather than a marked departure from former approved methods. One community follows the lead of another. For this reason, and because recent progress can be understood only in connection with the conditions from which it came, it is appropriate to outline the present accepted methods of dealing with delinquents, tracing briefly their growth and indicating the present line of development.

The present movement began with the passage of the first juvenile-court act in Illinois in 1899. That act has given direction to all subsequent legislation pertaining to children. In the late nineties the conditions to which delinquent and dependent children were subjected in institutions in Chicago and throughout Illinois generally were probably as bad as any in the country. This was due to the city's congestion and to the lack of ameliorating conditions which prevailed in other populous communities of the State. The situation was brought to the attention of the Chicago Bar Association in October, 1898, and a committee was appointed to investigate conditions and formulate remedial legislation. Its chairman, Hon. Harvey Hurd, called to his assistance a subcommittee of active child-welfare workers. Dr. Hastings H. Hart, now of the Russell Sage Foundation, was chosen secretary of this subcommittee, and to him was assigned the duty of drafting the bill.

Knowing how hard it is to engraft a new idea upon legislation, he, with his coworkers, searched the statutes for established legal usages which could be enlarged to meet the situation. The laws of Massachu-

setts and New York were especially suggestive. There were found provisions making it unlawful to restrain children in prison in company with adults or to try them at the same time. Either before or after conviction children might be placed in charge of institutions willing to receive them; after trial they might be placed on probation.

In the civil courts generally, where property rights were involved, a person was presumed not to have capacity to act under 21 years of age, but in the criminal courts children were held to full responsibility at 7 years. Some States had raised the age of criminal responsibility to 10 years, and this suggested the possibility of raising it to 16 years.

Natural parents desire the reformation of their erring children; punishment is incidental. Why should the State's purpose be different? The State is the parent of the unfortunate and helpless, so chancery courts had long held. It was a simple step to extend the doctrine of parens patriæ to include the erring as well as the unfortunate children. This possessed the incidental advantage of removing the children entirely from the police court atmosphere. A precedent was found in a provision which had been for a quarter of a century in the laws of several States to the effect that incorrigible or truant children might be brought into a probate or surrogate court charged with being delinquent and, if so found, committed to a reformatory. This obviated the necessity for jury trials, for it was not a criminal procedure. It also offered a way to escape formidable indictments in which children were charged with crimes in antiquated sixteenth century phraseology which only a portion of the lawyers understood a part of the time. Instead, the charge was made that the child was delinquent, which means merely bad.

And as children had guardians for their property, it was proposed to provide a guardian for their morals, and a probation officer was suggested, not to prosecute, but to represent the interests of the child. To prevent the courts from killing the purpose of the act by strict interpretation, it was deemed necessary to add that it be liberally construed, so that the care, custody, and discipline of the children of the State shall approximate, as nearly as may be, that which should be given by their parents.

The bill thus drawn became a law April 21, 1899. It marked a new era in criminal procedure. Its essential features and phraseology are now incorporated in the laws of 44 States and the District of Columbia and of many foreign nations.

THE INCREASED SCOPE OF JUVENILE COURT WORK.

The tendency has been to broaden the scope of juvenile court work. In various jurisdictions the age limit has been raised to 17, 18, 19, and even to 21 years. It soon became apparent that, to remedy delinquency and neglect, the custodians of children must

be dealt with. Therefore, juvenile courts were given authority to enter orders as to discipline or control or support; that is, to prescribe the course of treatment and to enforce these orders, as courts of equity do, by imprisonment for noncompliance.

In 1903 Colorado created a new crime by providing that whoever shall be responsible for, or contribute to, a child's delinquency shall be guilty of a misdemeanor, punishable by a fine of not more than $1,000 or imprisoned for not more than one year, or both. Similar provisions with various penalties have been widely adopted. One statute has made it a crime to indulge in conduct tending to lead a child into delinquency. This was because formerly there had to be delinquency before there could be contributing to delinquency; one can not contribute to a thing that does not exist (84th O. S., 366). As an example of the application of this law, it enables the juvenile court to punish a man who sends an innocent child into a gambling house. If the child did not know the character of the place, it would be unjust to hold him delinquent. So, under the old law, the person who sent him would escape on a charge of contributing. Some States have extended the jurisdiction of the juvenile courts to include all crimes against children. Where imprisonment is a possible penalty for contributing to delinquency a jury trial is a constitutional right.

MOTHERS' PENSION LAWS.

In an attempt to prevent rather than cure delinquency 20 States have, within the past two years, enacted laws making it possible to assist from the public treasury indigent mothers who, without this help, would be compelled either to surrender the custody of their children or leave them without proper care. In most of the States this assistance is granted on the order of the juvenile court. Much discussion has been awakened as to the advisability of such legislation, but those in charge of or familiar with the work of the juvenile courts generally favor it. It seems that no general rules can be laid down, the advisability of such legislation depending entirely upon local conditions. Where the situation is adequately met by existing agencies, or where such agencies, with new authority, can properly do the work, such laws are unnecessary. But where relief of this character has been inadequate, or existing public agents are inefficient, mothers' pension laws offer an opportunity for a new set of officials with a new spirit to teach efficiency and bolster up the public relief systems. In Cook County, Ill., where this system has been longest in operation, the work has been so systematized as to be a pattern for other localities. Under a recent law this character of relief is limited to mothers who are citizens of the United States and have been residents of Cook County for three

years and are proper persons physically, mentally, and morally to care for their children, but who are unable of themselves to provide properly and are without relatives of sufficient means and ability to support them.

The applicant for such a pension must sign a statement, which is verified. She is then visited by a district probation officer, who reports all visits to the head of the department. When the investigation is complete, if it is felt that there is a chance of the court's granting funds, the supervisor of the department, who is a trained dietitian, estimates the minimum budget for the family. These facts are then presented by the probation officer to a conference committee composed of members of the juvenile court staff. If they think the relief should be granted, an investigator of the county agent's office is notified, and he makes a separate investigation. If his findings agree with those of the conference committee, the mother and children are summoned to juvenile court and the judge passes on the case. Systematic supervision is made of the families to whom funds have been granted, and special conferences are frequently held by those engaged in this department. The work of the field supervisors is vastly different from the work of the ordinary probation officer, and specially trained people are needed to do effective service.

Since July 1, 1911, when the first Illinois law went into effect, pensions have been granted to about 600 families in Cook County. Of the 1,700 children in these families, only 1 has been brought into court for delinquency and 2 for truancy. The Chicago authorities attribute this remarkable record to the careful supervision given these families by the probation officers.

THE JUDGE'S PERSONALITY IS THE ESSENTIAL CONSIDERATION.

Good laws do not make efficient government. The laws creating and empowering a court are important, but the chief consideration is good administration. The first requisite is a good judge, because his spirit will dominate the whole institution. He can strengthen every force in the community which is working for good, or he can throw all the social machinery out of gear. This statement needs no argument in communities which have been unfortunate in this regard. Very many well-educated people have no social intelligence. They may have lived all their lives in their limited environment and have no knowledge of the way in which the great majority of people struggle. Many such people have never talked to a criminal and have never known a person suffering from distressing poverty. How could a lawyer bred in such an atmosphere appreciate or understand the problems of the poor? It very frequently happens that lawyers

of profound learning have little knowledge of the human affairs that arise in a juvenile court. So the selection of the judge is all important.

In most places the juvenile court jurisdiction has been conferred on courts already established, and in such cases the judges have either set aside part of their time for work with children or have designated one of their number to devote his time exclusively to this work. In the larger centers of population the latter practice has been the rule. In some places the terms of service in the juvenile court branch have been long, while in others the judges have rotated every one, two, or three months. In some places special courts have been created, the judges of which devote all of their time to this kind of work. Some of these judges are appointed, as in the District of Columbia and the State of Massachusetts; while in others they are elected, as in Denver, Colo. None of these systems is free from difficulty. None is proof against poor selections. Perhaps the worst system is that where the judges rotate every few months. Many of the judges look upon the work of this branch of their court as mere drudgery and take no interest in it. They regret leaving the other branches of the court in which the business is conducted with great decorum by wise lawyers, to face the heterogeneous mass in the juvenile branch. A short term does not permit a judge to know the children or the families with which he must deal, nor the agencies through which he must work. The careful investigations, well-considered recommendations, and devoted work of the various social agencies of a community can relieve a judge of many worrying details and of much of his responsibility; but a judge who serves but a month or two can not become properly acquainted with his own assistants. The court is not the sole reforming agency in a community. It is rather the place where the child is brought into contact with the social agencies which seek to work his redemption. It is important that a judge know not only the agencies and the character of their work, but the personalities of the various officers.

The choice of the judges in Chicago has been uniformly wise. There the jurisdiction was placed in the circuit court, which is a court with chancery powers. The judges have designated one of their number to preside in the juvenile court, and the terms of service of those so chosen have covered a period of years.

In Ohio the jurisdiction over children has been placed in a number of important courts such as the common pleas, probate, superior, and insolvency courts. The judges of these courts in the various counties meet and designate one of their number to exercise juvenile court jurisdiction. Many of the judges of these courts have no liking for this kind of work and recognize their unfitness for it, but among their number one is usually found qualified by education, disposition, and

willingness to perform these duties, and whose training fits him to undertake the administrative side of the work.

In California the jurisdiction is in county courts, and in the populous counties the judges are designated as in Chicago. Opposition to some of the judges recently developed in several places, which, however, was not strong enough to force their retirement. Thereupon the legislature was induced to pass an act making mandatory a change of judges once a year. The law will probably fail of its purpose because of an informality; if it stands, it will probably be destructive of good administration.

It is advisable that juvenile court jurisdiction be county wide, so that the occasional cases which occur in rural communities will be certain to receive expert attention. Difficulties arise in counties in which there are large municipalities other than the county seats. This can be met by appointing in those cities resident probation officers and giving them broad powers to conduct preliminary hearings, their authority being akin to that of masters appointed in civil cases to take testimony and make findings of fact, or of commissioners appointed by Federal judges to conduct preliminary hearings in criminal cases.

THE PROBATION OFFICER.

Probation work is an essential part of the juvenile court scheme; consequently the provision for probation officers is quite general. Probation grew out of a system, long common in criminal courts, of suspending sentence; that is, of postponing execution of the sentence during good behavior. Courts frequently requested relatives, public authorities, or charity workers to take special interest in persons so convicted and sentenced, and to report to the court, from time to time, their progress and manner of behavior. In the later seventies a probation officer under pay of the community was appointed in Boston, whose duty it was to have under supervision all persons thus released after conviction. As previously stated, this system was incorporated into the juvenile court idea, and under the administration of the best juvenile courts it has come to have an entirely new meaning. A child on probation is a charge of the court, and through its officers the various forces in the community are brought to bear in a helpful way upon him. It is an active, instructive, educational force, requiring trained and experienced workers. Probation work, if poorly done, can be worse than useless, but, if well done, it is the most constructive force for reformation. In most places probation officers are appointed by the judge, but this is far from universal. In some places they are paid out of public funds; in others, by local societies, religious or social; and in still others the work is entirely voluntary. In some places one system works best, and in others another. There is absolutely no doubt that the best results are

obtained from paid probation officers if they are wisely selected. Probation is a public function as much as school teaching, and should be paid for from the public treasury. It is work that should be consistently and regularly done by persons who make it their sole work. In the larger centers a number of probation officers are necessary, and their work should be supervised by a chief. For instance, Cook County, Ill. (including Chicago), has 76 paid probation officers—62 women and 14 men. There are in addition 46 police officers detailed to juvenile-court duty who work directly under the judge. They are under a sergeant, whose office adjoins that of the probation officers. This is the best scheme yet devised to insure harmonious cooperation between police and probation officers. It works well. It is essential that close harmony shall exist between probation officers and the judge. Of course, where the judges change every month or so this harmony can not exist, for the judge scarcely knows the probation officers before he passes on to other duties. Where the judge serves for a longer time, in order to secure harmony and to have the administrative branch of the work all responsible to one individual, it is probably wise that he have the appointing power. But inasmuch as so many judges have fallen short in this respect, failing apparently to grasp the meaning and importance of it all, it is probably wise that his selections be limited to a civil-service list. The civil-service examinations, however, should be conducted by people of long experience in social work, for they well know that character, disposition, and personality are the chief factors in probation work. In some places where civil-service rules prevail the appointing authority has been compelled to select from immature men and women who could pass good paper examinations but lacked the wisdom which age and experience bring.

Where the work can be divided, so that different kinds of duties are assigned to the various officers, a young man could sometimes be intrusted to look after older boys, but ordinarily it is not safe nor wise to intrust a person under 25 years of age with the duty of solving human problems and advising people in their home and marital relations. While, therefore, the answers to written questions on social problems and methods should form a portion of every civil-service examination for probation officers, the determining factors should be personality and temperament. A judge should have great liberty in selecting from a list so prepared. The selection should be made to meet his present needs. He must consider many factors. He may need, to round out his force, a nurse or a doctor or a person who speaks a particular language. In large cities which have a large percentage of foreign-born residents this becomes important, and often the determining factor, because no matter what an officer's qualifications for social work, they avail little if he is not able to talk to his charges.

STATE PROBATION COMMISSIONS.

Several States, in an effort to standardize probation work, have established State probation commissions which bear to the local officers about the same relation that State boards of charity do to charitable institutions. Their duties are to inspect and suggest; they are not charged with the responsibilities of administration. Such State commissions have demonstrated their value. Once established, they become permanent. Executive officers visit the various courts, counsel the local officers, tell them of their weaknesses, tell of the experiences of others and suggest improvements. Meetings of probation officers are held in various parts of the State, where their problems are discussed and their methods analyzed. Good results follow.

DETENTION HOMES.

Probably without exception the juvenile-court laws of the country make it illegal to detain children under a certain age (generally 12 or 14 years) in jails or places where adult persons are confined. In very many communities no regard is paid to this law, and no provision is made for the detention of juveniles; in others are found detention homes elaborately planned and expensively maintained with every convenience and equipment that could be desired. Some places maintain "homes" which had better be abolished. It is better to detain children in well-conducted jails than in poorly managed detention homes. Here, as in every other institution dealing with human beings, the first consideration is the personal element. It requires brains to conduct a detention home. No amount of equipment will make up for bad management or low ideals. The constant aim from the moment the child enters until he leaves should be to make him better physically, mentally, and spiritually.

Good equipment is always an aid, and certain requirements seem fundamental. The general surroundings should be wholesome; the house well lighted, ventilated, and heated, and so constructed that it can easily be kept clean and sanitary. Boys and girls should be entirely separated. This is important; and there should be such further separation of the various classes as to insure against moral contamination. Convenient arrangements must be at hand for bathing the children and for washing and disinfecting their clothing. A doctor within easy reach should be called at the first sign of trouble, to prevent sickness and epidemics. In large cities daily visits are necessary. The food should be plain, but well cooked and nourishing. If the children are kept busy, their minds filled with wholesome thoughts, and their bodies regularly exercised, discipline will largely take care of itself. Regular school hours are a great help to the children and a relief to the officers in charge. The short

period of detention is for many children a critical time, and impressions will be lasting. By a wise selection of teachers all possible chances of blundering treatment can be eliminated. If a good reader of child nature, such a teacher can be of great help to a court. The superintendent also has a splendid opportunity to study the children and should make detailed reports of her observations. Many courts ignore entirely this splendid opportunity of obtaining information.

The employees of the home should be appointed by the same authority that appoints probation officers, so that friction can be instantly eliminated. Women should have exclusive charge of girls, and ordinarily their services are preferable in the care of boys, excepting the older ones who are hardened in wrongdoing. Boys thus confined often have deep trouble in their hearts and need mothering.

Many of these requirements may be met even in rural communities where arrests are rare; and they should be insisted upon. Desirable results can often be obtained by an agreement between local authorities and some good woman, the wife, perhaps, of a farmer or a county official, who is willing to set aside a room or so in her residence for this purpose. That this method is entirely feasible is proved by the fact that so large a city as Boston has no detention home, but uses instead the boarding homes suggested by the aid society.

COURT PROCEDURE.

Comparatively few of the children brought before the court are held in detention before trial. It occurs, as a rule, only when they have no homes, or very bad homes; or when the arresting officer believes, because of the seriousness of the offense or the character of the child or his people, that he will not report when wanted at court. All persons having authority to make arrests, or their immediate superiors, should have power to release a child on a promise to appear in court when summoned.

Most of the complaints which come to court should be settled by the probation officer either in his office or in the very place where the difficulty arises. In this way about nine-tenths of the neighborhood quarrels over children's shortcomings should be hushed up.

The basis of all formal complaints is a petition. In Ohio, under a recent amendment (August 13, 1913), a bare allegation of delinquency is sufficient, but in most places this is followed with a description of the particular acts complained of. A summons then issues ordering the parents to produce the child at the time fixed for the trial. The next move is an investigation. Many see no practical objection to serving the summons by the probation officer who makes the investigation. It certainly saves great duplication of

effort and incidently of expense. The investigation should develop facts which will assist the court in reaching a conclusion; facts which throw light on the delinquent's character and environment; that show why he is bad and suggest the saving forces which can be brought to bear upon his life. When it is apparent that the offense is not serious or of an accidental nature, that the boy is normal and the home good, a long inquiry into family affairs is in bad taste. Under different circumstances such facts might be most material and necessary.

The setting of the court scene should be made a means to the desired end. While the trial should not be secret, all unnecessary publicity should be avoided. Neither children nor parents should be humiliated by having their shortcomings paraded before a gallery of onlookers. The room, therefore, need not be large; and no chairs need be provided for visitors. The child should be near and on a level with the judge. A table is preferable to a bench. The simpler the furniture the better. Very frequently, however, the trials are conducted formally in regular courtrooms with an elevated and canopied bench, with seats filled with visitors, and other children awaiting trial. It would be an unusual child who could be himself under these conditions. Administering an oath is well calculated to make a child ill at ease and is therefore worse than useless. Some courts, following the letter of the old law rather than the spirit of the new, find a child guilty or not guilty, regarding what he has done as of more importance than what he is. In all courts the particular act which caused the complaint is generally the first matter to receive attention. A short cut to the point is advisable. "Well, son, why are you here?" generally brings a confession which, with a word of explanation from the complaining witness, clears up that issue.

The real question is: Is he so delinquent as to need the State's care? That inquiry involves his moral, mental, and physical condition, as well as the character of home and neighborhood. The preliminary investigation of the probation officer should furnish this information and can be verified by the judge's questions. The feeling is general that girls' cases should be handled exclusively by women, and that a woman probation officer should invariably be present in court to represent the interests of the delinquent girls. Some go to the extent of advocating women judges. In Chicago the judge has, since March 1, 1913, delegated a woman probation officer to act in such cases in his stead. This woman assistant judge hears all cases in private, then makes her recommendation to the judge, who, without inquiry as to the facts, confirms her findings in a formal order. For this procedure there is no warrant in law. Those interested in such cases are advised of this informality, but never object, preferring this procedure to a hearing in open court.

Having determined the facts, the court can, under the law, use as a remedy any reform agency in the community. Generally speaking, two classes of remedies are open: Probation in some of its forms or institutional care. The first has been treated as extensively as the limits of this article will permit. It implies the employment of an efficiency expert to devise the best methods of driving evil from the child's life and to bring to bear on him every possible beneficent influence.

INSTITUTIONS FOR DELINQUENTS.

The work of caring for delinquent youths in institutions has been standardized, largely through the conferences on the education of backward, truant, delinquent, and dependent children. Each year sees new ideas emphasized, but in general recent progress has come through bringing the various schools up to the recognized standard rather than through the introduction of new methods and ideas. The best methods are generally agreed upon. In no line of philanthropic endeavor is the unevenness of progress better illustrated. On January 1, 1825, the New York City House of Refuge formally opened its doors. It was the first governmental reformatory for criminal youth. Within a few years five other cities followed. These were walled institutions. The Raus Haus, at Born, near Hamburg, Germany, established in 1833, was the first application of the cottage, or family, plan. France followed with the Colony de Metre. In 1855 Gov. Chase, of Ohio, sent a commission to Europe to study these two institutions, and the result was the Boys' Industrial School, at Lancaster, Ohio, the first institution in the country established on the cottage plan. A year later a school for delinquent girls was established on the same plan at Lancaster, Mass. Despite the long time intervening, there are still States, among them some of the oldest, which have no reformatories or industrial schools and continue at this late day to imprison child offenders in penitentiaries. Fortunately their number is very small.

Of late years several cities, among them some of medium size, have established schools for delinquents on the family plan in the country. Pittsburgh last year opened such a school. Cincinnati is at present reorganizing her House of Refuge on this basis. A like movement is in progress in St. Louis. Some of these institutions are primarily for truants and are under the management of the school authorities. In every city of any size there should be, and generally is, a "boys' school" to which boys from all districts should be assigned when it becomes apparent that their influence is detrimental in the regular schools. In most cases they should be allowed to go home at night. In one city a dormitory with about 15 beds is part of the equipment. The janitor and his wife live in the building. A

few days' detention here at the expense of the parents often has a salutary effect upon both the truant and his family.

There are throughout the country a large number of places of correction established by benevolent and religious societies. Such institutions have some choice as to the kind of delinquents they will accept, and can therefore adopt methods and policies that are not safe and practical in a public institution which must take under its care all delinquents within certain ages, no matter how bad they may be.

The principles on which reformatories maintained at public expense should be conducted are fairly well established. They should be in the country, on large tracts of tillable land. A poorly chosen site is an everlasting drawback. Institutions for the two sexes should be separate. The cottage or family plan is preferable. It affords a better and more natural method of living, and enables the physical equipment to grow with the school's needs. The dormitory plan is best for boys, except in honor cottages. Girls should have separate rooms. Individual beds are a prime requisite. Many schools do not provide enough dormitory watchmen. This is poor economy. If there are more than 25 in a cottage, family life disappears, and each cottage becomes an institution. If the number is 25 or less, there should be separate dining rooms in each cottage. Around a common family board many of the primary virtues are cultivated. A common kitchen counts for economy of time, effort, and money, and it relieves from drugdery and gives family officers time and opportunity to devote to their charges. Simple dishes can be prepared in the cottage kitchens. Fireless cookers on wheels afford a satisfactory means of transporting food. In girls' cottages the kitchen arrangements can be more elaborate to afford practice in domestic science. The Russell Sage Foundation has issued a book covering the requirements of cottages for such schools.

Honor cottages are maintained in many of the best schools, and here the greatest possible freedom is allowed. Frequently such cottages are made self-governing, copying the spirit of the George Junior Republic.

A number of small institutions is preferable to one large one. This makes possible segregation of the various classes of delinquents. They can be divided as to age, mental capacity, degree of delinquency, etc. No school should be so large that its general officers can not carry in mind the characteristics of its various pupils.

Commitments to such institutions should be indeterminate, especially within the limits of the ages within which they can do effective work.

Every child should be carefully examined upon entrance, and his physical defects should be remedied as far as possible. After his

mental traits have been observed and determined by the best-known methods, a course of treatment and training meeting his needs and capacity should be followed, and the system of education in school and shop should be broad and elastic enough to meet these needs. The work of creating and maintaining the physical property of such a school affords the best of opportunities for vocational training, for relating teaching to real life, and for making learning interesting.

Much of the waste product of regular schools finds its way into industrial schools and reformatories. Naturally, the best industrial school superintendents and educators early recognized that activity, the actual doing of things, the practical application of learning to something right at hand in which the child was interested, was the best way to hold this type of mind; that the child who could not meet the hard and fast requirements of the curriculum which led up to a classical education was not necessarily waste product. In the best schools of this kind the time of the pupils is divided between school work, industrial work, and recreation; and the three are related so that the child's interest in the one is carried over into the others, and his whole life thus woven into his education. Many a child has found for the first time in the industrial school a kind of teaching elastic enough to meet his needs.

The rules of most industrial schools provide that its inmates may, upon the recommendation of the superintendent, be released on parole, but in the legal custody and under the control of the institution. Most schools have too few parole officers. The superintendent should have authority also to place his charges in foster homes and to pay board.

Of most importance is the superintendent, for he gives to the institutions its spirit, and the only results worth striving for are spiritual. He must plan wisely for farm, cottage, school, officers, and inmates, and must execute as well as he plans. He must have a pleasing personality and moral and spiritual power. He must have enthusiasm. Such men are rare. Reformatories have been, and to some extent are, the footballs of politics. This made it difficult to secure good men for industrial school work. But of recent years our laws have been putting such institutions under nonpartisan or bipartisan boards, and protecting their officers by civil service, thus insuring permanency of management, making impossible some of the terrible disasters of the not distant past. This is a wonderful gain. It stays the hand of the executive, who in ignorance would rob an institution of its very soul. About the hardest help to find are good family officers, but the right kind of a superintendent will find them if he can guarantee immunity from political interference.

Of course, training schools for girls should have women in charge. In one State, Ohio, this has been impossible under constitutional

requirement that all State officers be electors, but that provision was changed at the November (1913) election.

Industrial school authorities have never lost sight of the purpose for which these institutions were established—the making of good citizens. Some other schools place more emphasis on scholarship than on character.

RELATION OF FEEBLE-MINDEDNESS TO DELINQUENCY.

It is apparent that the foregoing methods of treating wayward children by court and industrial school are developed from long experience, and it is certain that these methods will be modified and improved as more intensive study is given to various phases of the work. In fact, such a modification is now in process owing to the great fund of information concerning feeble-mindedness which has recently become available, largely through the writings and teaching of the authorities at the training school at Vineland, N. J. It is the relation of feeble-mindedness to delinquency and the treatment of the defective delinquent which are relevant here.

It has long been recognized that industrial schools contained an unusually large percentage of defectives, but no one correctly estimated the extent of it until the Binet-Simon scale came into general use. This is the most satisfactory intelligence test yet devised for those whose mental power is below that of a normal child of 12 years. A person is classed as "feeble-minded" when his intellect is so undeveloped or impaired that he is incapable of competing on equal terms with his normal fellows or managing himself or his affairs with ordinary prudence. There are three classes: Idiots, imbeciles, and morons, the latter term having been chosen to characterize those whose intelligence can be developed to equal children of 8 to 12 years. Subnormals whose intelligence exceeds this limit are called backward rather than feeble-minded.

In the past five years many tests have been made in public schools, as well as in industrial schools and reformatories. Less than 3 per cent of public school children are feeble-minded, and about 15 per cent are backward. In schools for delinquents the percentage of normal youths is very small; of backward youths, very large; while from 25 to 50 per cent are feeble-minded. The difference in the per-cent of the last-named is chiefly due to the methods of parole. Where the feeble-minded are kept longer than normal children, the percentage is of course high.

Backwardness is often cured when due to physical causes, such as defective sight or hearing, oral or nasal trouble, anemia or sickness generally; but the feeble mind can not be cured. The term means lack of mind, and it is impossible to supply what does not exist.

Defective children are not naturally bad. They are apt to become bad because too much is expected of them. Their conduct is often a blind protest against an order of things they can not comprehend. Again, they are easily led. The percentage of illegitimate births among feeble-minded girls is very large, probably twice as large as among normal women.

On the other hand, most feeble-minded youths under proper custodial supervision are well-behaved, easily managed, and happy. Many can be taught simple tasks. As a rule, morons are willing workers and can often be made self-supporting. Add the further fact that about 70 per cent of feeble-mindedness is inherited, and it becomes apparent that a radical change must be made in the method of treatment of this unfortunate class.

The best way to care for the defective delinquent is to prevent his propagation. This involves either sterilization or permanent custodial care. The first is at present impracticable, if for no other reason than that it is not sustained by public sentiment. Although authorized in five States, it is seldom done. The second is, by the best authorities, considered, for the present at least, the better method. It is estimated that the number of feeble-minded in the country exceeds 200,000. Of these about two-thirds are at large; approximately 40 per cent of the remainder are in prisons and reformatories. The others are in almshouses and institutions especially designed for the care of this class. Such institutions are maintained in 25 States. When segregation is accomplished, the problem of the defective delinquent is largely solved. In the meantime what should be the working policy of (1) institutions for delinquents; (2) juvenile courts.

(1) Every such institution should have its children tested by expert examiners. Their capacity once determined, the various classes should be segregated. This is now done in several places. At the Lancaster (Mass.) School for Girls the cottage farthest removed from the general group is set aside for the most defective pupils. This segregation benefits the brighter children as well as the defective, because the two classes require different kinds of treatment. Some of the defective girls are given rudimentary education; some are incapable of even that. All are trained in simple industries and have kind and watchful care. As opportunity offers, girls are transferred to the school for feeble-minded. This is a fine illustration of cooperation between institutions. The ideal arrangement is a separate institution. Dr. Hastings H. Hart, in an article on "The Extinction of the Defective Delinquent," suggests that the children's homes which have been closed in some States because of the modern system of home-placing be devoted to this use.

(2) Juvenile courts should have the means of detecting the feeble-minded. If psychological tests are made in the schools, discovery is made easy. It often appears in the report of the probation officer that the child attends a school for defectives. Pertinent facts of this nature are often revealed by the parents, if they have been approached in the proper manner. However, too much credit should not be given to the statements of parents that their children's shortcomings are due to head injuries received in infancy. The safest method of detecting deficiency is the Binet-Simon test. Every court of any importance should make arrangements for its use.

The best disposition for delinquent defectives is permanent custodial care. In almost all the States which maintain institutions for the feeble-minded, children are received or discharged at the request of the parents, who are sometimes blinded by love or swayed by selfishness, or lack judgment. Consequently, their action is often contrary to the best interest of their children as well as of society. The first aim should be to give to institutions for feeble-minded permanent control, like institutions for the insane. Under most juvenile-court laws the judge has the right to commit such children permanently and without the consent of parents. The power is not exercised as often as it should be. If, as is generally the case, the institutions for the feeble-minded are not large enough to meet the demands of the community, it is the duty of the judge to select for commitment those who are most dangerous to society. First among these is the girl of child-bearing age. According to Dr. Goddard, of Vineland, feeble-minded women are three times as likely to marry as feeble-minded men. They are, too, the objects of pursuit by licentious men, while no normal woman is physically attracted by a feeble-minded man.

EXAMPLES OF ADVANCED LEGISLATION.

The State of New Jersey is making most extensive plans for the care of its mental defectives whereby they will be discovered in early childhood and effectively cared for through life at the least possible expense to the State.

About 1 person in every 500 is afflicted with epilepsy. Dr. Healy has carefully studied over 1,000 repeaters who have passed through the juvenile court in Chicago. He finds that 7½ per cent are epileptics. He concludes that persons afflicted with this trouble are peculiarly susceptible to many forms of moral deterioration and that the welfare of society demands their segregation.

Of late years several courts have been able to command the services of physicians and psychologists who are able to make intensive studies of cases referred to them. Such studies frequently reveal conditions, mental, moral, physical, or environmental, which the judge in the rush of business would overlook, but when known they become the

basis of intelligent treatment and discipline. To meet the need for this kind of enlightened service as well as to standardize and unify the work of 88 juvenile court judges, the legislature of Ohio provided (Apr. 22, 1913) that—

> all minors who, in the judgment of the juvenile court, require State institutional care and guardianship shall be wards of the State and shall be committed to the care and custody of the Ohio Board of Administration, which board thereupon becomes vested with the sole and exclusive guardianship of such minors.

This board is then to maintain a "Bureau of Juvenile Research" and employ competent persons to have charge thereof and make investigations as to mental, physical, and other conditions, and thereupon base recommendations for future maintenance, custody, and treatment. The board shall then assign the child to a suitable State institution or place it in a family under proper regulations, and the board is authorized to transfer it from time to time as its interests may demand. It is further empowered to receive children for observation from any public institution. Similar legislation is in contemplation elsewhere. In December, 1911, at a joint meeting of the New York Probation Commission with kindred organizations, it was resolved:

> That it be recommended that State custodial institutions be established, one for males and one for females, for the treatment of feeble-minded persons convicted of crime, together with some form of preliminary institution to serve as a testing house in order to determine if persons charged with crime are or are not mentally defective.

Mention should be made of another notable act of the Ohio Legislature, popularly known as the "Children's code." The laws of that State pertaining to children were in a sad state of confusion. Some were antiquated, some meaningless; some, excellent in themselves, were to the general mass unrelated or conflicting. To remedy this, under an act of 1911, a commission was appointed to codify these laws and suggest amendments. The commission was composed of two men of legal learning and social sense. They studied the laws of the various States pertaining to juvenile courts, reformatories, industrial schools, public schools, children's homes, institutions for defectives, child labor, etc.; they adopted those features best suited to the local needs, presenting the same to the legislature in the form of a bill, which passed April 28, 1913, almost without amendment. It is the most advanced legislation of its kind. If there is to be a code of evidence, of commercial paper, and of insurance laws, why not a children's code? The confusion which existed in the Ohio laws is common to most of the States. It is hoped that her example will be emulated.

CHAPTER XXIV.

PROGRESS OF TEACHER TRAINING.

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Contents.—I. Introduction. II. Specially equipped schools of education or teachers colleges. III. State universities. IV. Smaller private colleges. V. Normal schools. VI. State departments of education. VII. City school systems. VIII. Summer schools.

I. INTRODUCTION.

Even a partial survey of the field of activities in teacher training in the United States reveals a bewildering series of distinguishable activities which may be said to aim at raising the standard of professional service in the public-school system. It is the purpose of this account to make a rough classification of the persisting older movements and the newly instituted movements which look toward furnishing some definite pedagogical equipment for this work.

There are various agencies and organizations whose teacher-training functions may be fairly differentiated. First, there are the private institutions with special equipment, endowment, and organization for independent administration, and unrestricted fields of teaching and investigation, such as Teachers College, Columbia University, and the School of Education, University of Chicago. Then come State universities with their peculiar responsibilities and somewhat restricted, but more clearly defined, fields of service. Private colleges, because of their relations to the public schools and in many cases official relations to State systems of education, have also a vital work to do in this same field. Normal schools by virtue of their very existence are primarily if not exclusively concerned with this one professional problem. State departments, in the present centralizing tendencies in State systems of education, are increasingly assuming and securing authority in setting standard qualifications for teachers, and are also putting forth corresponding effort in various ways to see that efficient service consistent with such standards is rendered by these "approved" teachers. City school systems are more than ever before setting systematically about the work of training teachers, and are furnishing to other groups of professional pedagogical workers new points of view as to essential principles and methods to be observed in this business of training teachers. The whole institution of the summer school—including in this class of professional work (for it is mainly for teachers) the summer sessions of universities, colleges, and normal schools, and sectional or consolidated long-term summer institutes, the county institutes, the city institutes, and the high-school summer schools—has assumed proportions in the work of teacher-training whose importance and

possibilities have not been as yet fully realized or appreciated. The movement looking toward the more general establishment of genuine normal-training curriculums in public high schools has become one of critical importance to the immediate development of such schools and to secondary education generally. Still other organizations are affecting in measurable ways the progress of teacher-training, if we could sense or roughly estimate the summation of influences which various reading circles, teachers' associations, and other corporate expressions of the teachers' professional consciousness are exerting.

No merely quantitative or statistical account—even if it were available—would adequately represent the momentum and extent of this professional work for teachers. This report will contain a quantitative account of what in the movement lends itself to such treatment. With this will be offered, necessarily, some interpretation of these figures and some citation of specific instances of significant or novel advance.

The data upon which most of this account is based were secured through letters of inquiry. Different sorts of letters were addressed to those in charge of many of the agencies of teacher training, some definite questions were put, and a general request was made for reports of any other important items of progress. The replies are all individually valuable, but difficult to summarize in any fashion which will do justice to the variety of ideas and conceptions of the nature of the work which they contain. Because of this personal equation in interpretation, several replies will be quoted in full. It should be kept in mind that these selected replies also serve to suggest how complex our problem really is and how individualistic at present most of the pioneer movements are.

The first plan of this report, to exclude from consideration all accounts of significant progress which did not fall strictly within the year just passed, had to be abandoned. Many projects of great interest and importance, in addition to these initiated and completed within the year, are merely continuing well, others are culminating, and still others have been abandoned during this period. For these reasons the survey is broader than a survey of one year's developments. It can not, however, pretend to be exhaustive, nor to have placed the emphasis properly in each case.

A large field of teacher-training is by common consent assigned to the university and college, namely, that of research, extended experimental and comparative studies, and the technical preparation of those looking toward professorships in college departments of education, in normal schools, and departmentalized teaching in high schools, or to superintendencies. Few college or university heads yet view the field clearly. They in most cases make concessions to some sort of vague outside pressure and even encourage developments, although they formulate no constructive program and initiate no distinct and effective type of organization to do this teacher-training

work. The latter step is as essential as any correct academic or scholarly theory of the professional equipment of teachers. This administrative problem will be discussed later on.

The college professor of education has become a factor in our educational development to reckon with. He has ceased merely to derive trite maxims from an academic philosophy; he reaches out into various related fields, psychological, sociologic, economic, or industrial, as the case may be, and actually makes various new departments of study; he steadies himself in his emancipated position as coordinate in rank with older academic and professional colleagues, evolving his method and educational philosophy in accordance with new social, industrial, and political conditions; he recruits his teaching ranks with men who are of the constructive research order; he plans ahead how to help his intending students to orient themselves in the labyrinths of the general college curriculums planned yet with no reference to intending teachers; he meets the schoolman in the schoolroom and handles without gloves the dusty problems of that atmosphere. Often his problems are so new that in any particular field he can exhaust his knowledge and the available literature in a one-hour course. His material is still somewhat unsystematized; his nomenclature is confusing; his courses overlap and are not so easily standardized for "transfer of credits" as those in Latin or mathematics. Some of his colleagues still think of him as an alien. He himself, however, is for the most part so immersed in his own problems, fascinating and urgent, as to be immune both to intimations of his real importance and to the attitude of his academic colleague who has ample time for leisurely surveillance of a neighbor's doings.

An examination of all the available university and college catalogues for the past two years furnished data for the following tabular presentation of the variety of matters bearing somewhat directly on the instructional program of the schools or departments of education. Table I shows the differentiations of fields and of courses, and the varieties of exploitation of new fields, as well as some adaptation to local conditions and to the individual penchants of the professors in charge of the work. Teachers College, Columbia University, and the School of Education, of Chicago University, are not represented in the table, for they are in many ways in a class by themselves and are to be considered separately.

EXPLANATION OF TABLE I.

This table is the result partly of interpretation of courses. For instance: Child psychology, genetic psychology, and psychology of education are conveniently included under educational psychology. Religious education is listed under moral, not because it is regarded as identical with, but most closely allied to, moral education. Courses on defective children are grouped under abnormal psychology. Wherever the relationship of courses does not seem as close as the foregoing, but still indicates some general kinship, the name of the course is stated in the column more nearly its own. The column "Other topics" includes general courses as well as those which can not reasonably be grouped under other heads.

TABLE I.—*Instructional work in education in a number of universities: Courses—Teachers and their degrees—Number of teachers in each course.*—PART I.

Schools.	Number of courses.		Number of teachers.		Degrees of teachers.		Introduction to education.		History of education.		Principles of education.		Educational psychology.		Secondary education.		Elementary education.		School administration.		School management.		General method.		Special method.		Teaching observation.		Social education.		Moral education.		Experimental pedagogy.	
	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13	1911-12	1912-13
State universities.					*Ph.D.*	*Ph.D.*																												
Alabama	[1]20	....	[2]12	....	7	....	....	....	1	....	....	....	33	....	[4]1	....	....	....	3	....	....	....	....	....	9	....	....	....	....	....	....	....	....	....
Arizona	1	1	1	1	0	0	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Arkansas	6	6	3	3	0	1	....	....	1	1	....	....	[5]3	[5]3	1	1	....	....	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....
California	[6]29	....	[7]8	....	4	....	....	....	[8]3	....	1	....	1	....	[9]5	....	....	....	....	....	1	....	1	....	[10]1	....	2	....	....	....	1	....	....	....
Colorado	18	18	7	7	1	1	....	....	2	1	2	2	....	....	....	....	....	....	....	....	....	....	2	....	....	1	....	2	....	....	....	....	....	....
Idaho	....	7	....	[11]9	....	4	....	....	....	2	....	....	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	1	....	....	....	....	....	....
Illinois	16	17	4	4	3	3	1	1	1	3	1	2	1	1	2	1	....	....	1	1	....	....	....	....	....	....	1	1	....	1	....	....	....	....
Indiana	24	42	12	[12]22	....	....	....	....	1	2	....	....	1	2	1	[13]4	2	[13]4	....	....	....	....	1	....	9	24	....	....	....	....	....	....	....	....
Iowa	31	31	4	4	1	....	....	....	3	2	4	4	3	3	2	2	....	....	3	3	....	....	2	2	....	....	....	....	2	2	1	[14]1	....	....
Kansas	28	29	26	27	2	[15]2	....	....	2	2	....	....	5	6	1	1	1	1	1	1	....	....	....	....	16	19	1	1	1	1	....	....	1	1
Kentucky	9	17	3	4	0	0	....	....	3	4	....	1	3	3	1	1	....	....	1	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....
Maine	8	14	1	1	1	1	....	1	2	2	1	1	1	1	....	....	....	....	2	2	....	....	....	....	1	[16]1	....	....	....	....	....	....	....	....
Michigan	30	33	[17]15	[18]10	4	4	....	....	4	3	1	2	3	4	2	2	....	....	2	2	....	....	....	....	5	6	....	....	1	1	1	1	....	....
Minnesota	....	23	....	8	....	3	....	....	....	3	....	1	....	....	....	[19]1	....	([20])	....	2	....	1	....	....	....	....	....	....	....	....	....	([21])	....	....
Mississippi	6	6	2	2	....	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	1	1	1	1	....	....	1	1	....	....	....	....	....	....
Missouri	52	54	49	49	16	15	....	....	2	2	1	1	2	2	2	2	1	1	7	7	[22]1	[22]1	....	....	16	16	2	2	1	1	....	....	....	....
Montana	13	13	2	2	2	2	....	....	1	1	1	1	1	1	1	1	....	....	....	....	1	1	1	1	2	2	1	1	....	....	....	....	....	....
Nebraska	40	42	10	16	....	....	....	....	2	2	....	....	4	4	8	6	4	[23]2	2	2	1	1	....	....	7	7	....	....	....	....	....	....	....	....
New Mexico	10	13	1	1	0	0	....	....	2	2	....	....	....	....	....	....	....	....	....	....	1	1	1	1	6	9	....	....	....	....	....	....	....	....
North Carolina	14	14	4	4	2	2	....	....	1	1	1	1	3	3	2	2	....	....	1	1	....	....	1	1	....	....	....	....	....	....	....	....	1	1
North Dakota	21	22	4	5	2	3	....	....	3	3	....	....	2	2	1	3	....	....	2	1	....	....	1	1	2	2	....	....	1	1	....	....	....	....
Ohio	23	....	[11]20	....	[26]3	....	....	....	2	....	1	....	2	....	2	....	....	....	3	....	1	....	....	....	....	....	[27]1	....	....	....	....	....	....	....
Oklahoma	7	31	2	3	0	1	....	....	1	2	1	1	....	2	1	2	1	1	1	1	....	....	....	....	12	....	....	....	1	1	....	1	....	....
Oregon	12	12	2	2	1	1	....	....	2	2	....	....	2	2	2	2	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
South Carolina	....	14	....	6	....	2	....	....	....	2	....	2	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
South Dakota	11	11	1	1	1	1	1	1	1	2	2	2	2	2	1	1	1	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Tennessee	10	19	1	2	....	....	....	....	2	2	....	....	1	....	2	2	....	....	....	1	....	....	2	1	....	10	[27]1	....	....	....	....	....	....	....
Texas	27	....	[11]24	....	[28]5	....	....	....	2	....	....	....	3	....	2	....	....	....	....	....	[29]3	....	....	....	11	....	....	....	....	....	....	....	....	....
Utah	14	16	6	5	1	....	....	....	1	1	1	1	1	1	1	1	[30]7	7	....	1	....	....	....	....	....	....	1	1	....	....	....	....	....	....
Vermont	6	6	1	1	1	1	....	....	1	1	1	1	1	1	1	....	....	....	1	1	....	....	....	....	6	7	....	....	....	....	....	....	....	....
Virginia	5	5	2	2	0	0	....	....	1	1	1	1	....	....	1	1	....	....	1	1	....	....	....	....	....	....	....	....	1	1	....	....	....	....
Washington	30	30	7	7	3	3	....	....	4	4	1	1	1	1	1	1	3	3	2	2	1	1	1	1	....	....	2	2	1	1	....	....	....	....
West Virginia	17	....	....	....	....	....	....	....	2	....	....	....	1	....	....	....	....	....	2	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....
Wisconsin	....	27	....	10	....	....	....	....	....	4	....	1	....	4	....	....	....	....	[31]1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	1

Other universities.																																					
Harvard	10	....	[18] 5	....	....	....	....	....	....	4	....	....	....	1	....	1	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New York	52	44	20	17	11	10	[24] 17	[24] 17	1	1	1	1	1	1	....	....	[25] 1	[25] 1	1	1	1	....	1	1	6	5	1	1	....	....	[14] 1	[14] 1	....	....	....
Pennsylvania	6	7	1	1	1	1	1	1	1	2	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Totals[32]	472	583	191	203	52	52	20	21	47	50	20	22	40	45	34	36	22	24	31	31	8	7	15	11	76	121	11	12	9	11	4	5	2	3

[1] Includes philosophy, psychology, and specials as part of whole program offered by school of education.
[2] Includes several other departments.
[3] Includes general psychology.
[4] Another under administration.
[5] Includes psychology.
[6] Includes school legislation in California; contemporary theories of social reform; the child and the State; public health.
[7] Includes lecturers but not professors of other departments.
[8] Includes 1 in American education.
[9] And 1 in language literature.
[10] With arrangements in other departments.
[11] Includes professors from other departments.
[12] Includes assistants in education not listed in 1911.
[13] Includes special instruction and administration.
[14] Religious education, 1.
[15] Does not include degrees from other departments.
[16] Includes observation.
[17] Includes professors from other departments, and lecturers.
[18] Includes lecturers.
[19] Secondary teaching, 1.
[20] Elementary teaching, 1.
[21] Religious education, 1; principles of religious instruction, 1.
[22] Class management, 1.
[23] Kindergarten, 2.
[24] Foundation courses.
[25] Kindergarten, 1.
[26] In education.
[27] Includes practice teaching.
[28] Education in America.
[29] Includes class management.
[30] 4 of 7 kindergarten.
[31] Educational legislation.
[32] Data not accessible for making totals "complete."

TABLE I.—*Instructional work in education in a number of universities: Courses—Teachers and their degrees—Number of teachers in each course.*—PART II.

Schools.	Seminar.		Philosophy of education.		Educational problems.		School hygiene.		Practice teaching.		Educational classics.		Supervision.		Vocational education.		Rural schools.		Abnormal psychology.		Comparative education.		Institutes of education.		Educational research.		Current topics.		Study.		Educational ideals.		Other subjects.	
	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13	1911–12	1912–13
State universities.																																
Alabama	2						1		(2)	(2)																					(1)	
Arizona																																
Arkansas																																
California	2														1						1										(3)	
Colorado									3												2					1					(4)	(4)
Idaho										(5)																						
Illinois												2		1																	(6)	
Indiana	2	3	1					1	1	4			1								1				1	2					(7)	(7)
Iowa	4	4	2	2			1	1					1	1					1	1	1	1									(8)	(8)
Kansas	5	5	1	1			1	1			2	2	1	1	1	1			1	1	1	1									(9)	(10)
Kentucky		2	1	1														1				1				1						
Maine										2															1	1						(11)
Michigan	5	6					1	1			1								1	12 1	1	1					13 1				(14)	(15)
Minnesota		3		1						1				1		(16)						1									(17)	
Mississippi	1	1	1	1																												
Missouri	5	7					1	1											1	1					18 1	18 1	1	1		1	(19)	(19)
Montana	2	2					1	1															20 1	20 1								
Nebraska	2	2	2	2			1	1			1	1	4	4	(21)						1	1				2		2		1		
New Mexico																																
North Carolina			1	1	25 1	25 1					1	1																			(9)	(9)
North Dakota		2	2	2							2	2																	1	1	(26)	(27)
Ohio	4		2				2				2								12 1		2										9 2	
Oklahoma		2																			1	1				28 1		23 1		1		
Oregon			1	1																							1	1	1			(29)
South Carolina				2																1											(30)	
South Dakota	1	1									1	1																				
Tennessee	2	1						1			2																					
Texas	5		1																													
Utah						1																									(31)	
Vermont	1	1	1	1																												
Virginia																																
Washington	4	4													1	1			2 1	12 1	1	1			2	2	2	2		2	2	
West Virginia	3		2								1										2							1			(21)	
Wisconsin		3										1		1								1				1					(32)	

Other universities.																																			
Harvard	1	....	....	....	1	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	[12] 2	[12] 1	1	....	[22] 3	....	1	1	[23] 2	[23] 1	....	....	2	2	([24])	([24])
New York	5	5	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	1	1	1	1	....	....	....	1	1	....	....
Pennsylvania	....	1	....	....	.....	.....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Total	56	55	18	15	2	2	8	8	4	15	13	10	7	8	4	3	....	1	8	7	15	9	5	2	7	12	9	9	3	2	6	7	42	27

[1] Three courses in special subjects.
[2] Provision made for it.
[3] Higher education and citizenship, 1; schools of California, 1; honor course; educational conference.
[4] General psychology, 1; anthropology, 4; ethics; social psychology; education and sociology.
[5] Eight special courses.
[6] Elementary curriculum, 1; agriculture, 1.
[7] One in orthogenics.
[8] School support, 1.
[9] Education in America.
[10] Practical problems in public-school education, 1; education in America, 1.
[11] Class management, 1.
[12] Defective children.
[13] Contemporary educators.
[14] Course of study, 1.
[15] Course of study, 1; mental development, 2.
[16] Industrial training, 1.
[17] Higher education, 1; technique of reading, 1.
[18] Elementary psychology, 1.
[19] County superintendency.
[20] Play.
[21] Agriculture, 1.
[22] Music.
[23] Experimental pedagogy.
[24] Domestic art, 2.
[25] Current.
[26] Current literature and nature study.
[27] Current literature.
[28] Philosophy of education.
[29] Organization of school curriculum, 1.
[30] General psychology; elocution, 3; aesthetics, 1; sociology, 1.
[31] Science of pedagogy; domestic science.
[32] Mental development, 2; modern education, 1; industrial and physical education, 1; educational values, 1.

This rapid multiplication of educational courses has resulted in an unfortunately confusing nomenclature for courses. There does not seem to be a sharp differentiation between many of these courses. This often results in injustice to students who transfer from one school to another. Courses differently titled appear to be quite similar in content.

This confusion in part, with the varying practice with reference to "minimal essentials" as introductory courses, reflects a difference of opinion as to what really constitutes teacher training. It is quite evident that courses in education should be, in many cases at least, as specific as those in law or medicine. A glance at Table I reveals the fact that the only approach to a constant offered is "history of education," and this can not be judged a constant if such schools as the University of Chicago are included. Here history of education is not required. State boards of education, in the requirements for professional examinations, show the same lack of uniformity. The varying emphasis placed on courses may be due to several causes. Among these is the lack of equipment in the school itself, including the lack of preparation of the instructors in charge, and also the insufficiency of teachers. But other partial causes lie deeper than those just named.

Is there any fundamental difference between "principles of education," "philosophy of education," and the "psychology of education," as they are often actually given? These titles designate overlapping courses. In fact, the philosophy of education is still vaguely described everywhere. There is no textbook, apparently, that adequately represents what this course should include. Some schools treat principles of education as an elementary, introductory course; others as one whose prerequisites should be history of education and educational psychology. Each defines its own courses. Each State has its own requirements, with even the statutes specifying the same in terms which are not definite. A cooperative effort should be made to determine what is essential and what may serve as simply electives for undergraduates in similar groups, what as prerequisite for entrance to later graduate work, and what as merely cultural work for those who do not intend to teach, but who as laymen and citizens need some understanding of educational principles and administration.

Table I shows that our universities are responding to the increasing demand for more efficient teachers. There is not only a general increase in courses, but there is a more thoroughly trained and selected teaching body giving these courses. The number of professors with the doctor's degree indicates more highly specialized work. This is evident in the number of seminars offered and in the greater opportunities for research. See Table II.

Tables I and II also reveal a general tendency to raise the standard of teaching. The tables do not show, of course, how efficiently these courses are taught, but from the descriptions of the courses one senses the advent of the expert and sees evidence of genuine curriculum thinking.

The tables are also significant in what they do not record. There are no courses in textbook making, only a few courses on the science and art of study, only a few courses on moral education or religious education, or in educational statistics, or as yet in either industrial education or in higher education. Four institutions report courses offered in the administration and methods of higher education for those definitely preparing for work, administrative or instructional, in normal schools, colleges, and universities. (For typical contents for such a course see Ed. Rev., Nov., 1913, p. 390 ff.) It should be noted that the rate of increase in research in education and in number of doctorates conferred exceeds that in any other field of graduate study. There are only a few courses in experimental education. The technique of teaching—that is, the art of developing lessons in class—is not treated adequately in the secondary subjects. Special methods are taught by college men in charge of these particular departments, but this does not guarantee that an effective technique of teaching is offered. There is a noted recent increase in the number of courses in secondary education, with in many cases a fairly thoroughgoing differentiation of courses in that field.

In addition to the catalogue study of the teacher-training, a general letter was sent to professors of education in universities and a number of the smaller colleges requesting information concerning changes in general policy or advanced steps in administration which have occurred recently, especially during the year 1912. There was a further request for accounts of developments contemplated for the near future. With this was inclosed a list of topics indicative of the kind of information sought, it being made clear that the list was not comprehensive.

The list follows (items 1–6 inclusive), with other items added which were furnished by those representing the colleges and universities who replied to our questionnaire:

1. Steps taken looking toward making the work of the professional training of teachers coordinate administratively with other professional work of university grade, such as engineering, medicine, or law.

2. Instances of cooperation in the teacher-training work by other college forces, as, for example, medical schools (medical inspection), agricultural departments, library staffs, department of physical education, etc.

3. Which of the following activities are under the administrative control of the department or school of education?

(*a*) Teacher's courses in special subjects given by other departments.

(*b*) Physical education for teachers.

(*c*) Recommendation of teachers for positions.
(*d*) Inspection of State schools.
(*e*) Extension work for teachers in service.
(*f*) Field work, using city schools as laboratories for advanced students, etc.
(*g*) High-school conferences held on grounds.
(*h*) Summer schools.
(*i*) Education surveys.
(*j*) Technological departments (manual training, domestic science, public-school music, etc.).
(*k*) Graduate work in education.

4. Special requirements for the master's or doctor's degree in education, differing from requirements for degrees in other branches of study; for example, demonstrated teaching ability, personal traits, moral force, general culture, etc.
5. Changes in entrance requirements to courses in education.
6. Changes in number of hours or in specific subjects as requirements for teachers' certificates or diplomas.
7. Practice schools.
8. School clinic.
9. Measurements of efficiency.
10. New buildings.
11. Affiliation with city schools.
12. Degrees in education.
13. Special short curriculums.
14. Follow State board standards in teachers' certificates or diplomas?
15. Double standard for granting teaching certificates or diplomas?
16. Addition of new courses.

Fairly detailed replies were received from 67 institutions. For purposes of comment and interpretation we may group the institutions heard from into three classes: *A*, special universities; *B*, State universities; *C*, the smaller colleges. It will be noted that some of the questions relating to administrative problems refer chiefly to the institutions in classes *A* and *B*. Most of the items, however, are significant and pertinent for all. The following Tables II and III contain the list of institutions and show roughly the information classified and attributed to proper institutions. Some institutions not reporting upon the chart items in most cases reported other interesting activities. Reports on items 7 to 16 merely show recent happenings or make incidental mention. There are many practice schools and institutions granting degrees, for example, not shown in the table.

TABLE II.—*Tabulation of answers to questionnaire.*[1]

Questions.[2]	Special universities.										State universities.																					
	Chicago.	Cincinnati.	Columbia (T. C.).	Cornell.	Geo. Washington.	Pennsylvania.	Leland Stanford.	Pittsburgh.	Total.		Arkansas.	California.	Illinois.	Purdue.	Iowa.	Kansas.	Maine.	Michigan.	Minnesota.	Missouri.	Montana.	New Mexico.	North Dakota.	Ohio.	Oklahoma.	Oregon.	Tennessee.	Texas.	Utah.	Virginia.	Washington.	West Virginia.	Wisconsin.	Wyoming.	Total.
1. Separate organization of department of education.	+	+	+	0	+	+	pr.	+	+=6; 0=1		+	0	0	...	+	+	0	0	+	+	0	...	...	✓	0	pr.	0	+	+	0	+	0	0	+	+=9; ✓=1; 0=10; pr.=1.
2. Cooperation with other departments.	+	+	0	+	0	0	...	+	+=4; 0=3		...	0	+	...	+	+	✓	0	+	+	0	...	...	+	...	+	+	+	0	0	...	+	+	+	+=12; ✓=1; 0=5.
3. Are these activities under department of education?—																																		
(*a*) Special subjects in other departments.	+	+	+	0	+	0	...	+	+=5; 0=2		0	0	0	+	+	0	✓	+	...	+	0	...	0	0	+	+	✓	+	+	pr.	✓	+	0	0	+=9; ✓=3; 0=9; pr.=1.
(*b*) Physical education for teachers.	✓	+	+	0	0	0	...	0	+=2; ✓=1; 0=4.		0	0	0	+	0	0	0	0	...	+	0	...	✓	0	+	+	0	pr.	+	0	0	0	0	pr.	+=5; ✓=1; 0=14; pr.=2.
(*c*) Recommendation of teachers for positions.	✓	+	+	+	+	0	...	+	+=5; ✓=1; 0=1.		+	...	+	...	+	✓	✓	+	+	+	+	+	+	0	+	+	+	✓	+	+	+	✓	0	+	+=16; ✓=3; 0=2.
(*d*) Inspection of State schools	✓	...	0	0	0	0	...	+	+=1; ✓=1; 0=4.		+	...	0	...	✓	+	✓	+	✓	+	✓	...	...	+	+	0	+	✓	0	+	✓	0	✓	0	+=8; ✓=7; 0=5.
(*e*) Extension work for teachers in service.	✓	+	0	0	+	0	...	+	+=3; ✓=1; 0=3.		+	...	+	...	+	+	0	+	+	✓	+	...	...	+	+	0	+	0	0	+	✓	+	0	+	+=13; ✓=2; 0=5.
(*f*) Field work for advanced studies.	+	+	0	+	+	0	...	+	+=5; 0=2		0	...	+	...	+	+	+	+	...	✓	+	...	...	+	+	+	+	+	+	...	+	+	+	...	+=15; ✓=1; 0=1.
(*g*) High-school conferences on grounds.	✓	+	+	0	0	0	...	+	+=3; ✓=1; 0=3.		+	...	0	...	0	+	+	0	...	✓	...	...	...	+	+	+	0	0	+	+	✓	...	0	+	+=9; ✓=2; 0=6.
(*h*) Summer schools	✓	...	✓	+	0	0	...	✓	+=1; ✓=3; 0=2.		+	...	✓	+	✓	0	0	0	+	✓	✓	...	...	0	+	✓	✓	✓	✓	+	0	0	0	✓	+=5; ✓=9; 0=7.
(*i*) Educational surveys	+	+	✓	+	0	0	...	+	+=4; ✓=1; 0=2.		+	...	+	...	+	+	0	0	+	+	...	...	...	0	+	0	pr.	+	✓	+	+	+	+	0	+=12; ✓=1; 0=5; pr.=1.
(*j*) Technological departments	+	+	+	+	0	0	...	+	+=5; 0=2		+	...	0	...	✓	0	0	0	...	+	...	...	...	+	0	+	0	0	+	...	pr.	0	0	+	+=6; ✓=1; 0=9; pr.=1.
(*k*) Graduate work in education	+	+	+	+	0	...	...	+	+=5; 0=1		+	...	0	...	0	0	+	0	...	0	...	...	...	0	+	+	...	0	+	+	+	+	...	...	+=8; 0=7.
4. Special requirements for master's or doctor's degree.	+	+	✓	0	+	...	...	+	+=4; ✓=1; 0=1.		+	...	0	...	0	0	✓	0	...	0	0	...	...	0	0	0	0	0	0	...	+	0	...	...	+=2; ✓=1; 0=13.

[1] KEY: +=Yes; 0=No; ✓=Doubtful interpretation; pr.=Proposed.

[2] For full reading of questions, see p. 507.

TABLE II.—*Tabulation of answers to questionnaire.*[1]—Continued.

Questions.[2]	Special universities.										State universities.																							
	Chicago.	Cincinnati.	Columbia (T. C.).	Cornell.	Geo. Washington.	Pennsylvania.	Leland Stanford.	Pittsburgh.	Total.		Arkansas.	California.	Illinois.	Purdue.	Iowa.	Kansas.	Maine.	Michigan.	Minnesota.	Missouri.	Montana.	New Mexico.	North Dakota.	Ohio.	Oklahoma.	Oregon.	Tennessee.	Texas.	Utah.	Virginia.	Washington.	West Virginia.	Wisconsin.	Wyoming.	Total.
5. Changes in entrance requirements to education courses.	+	+	+	0	+	...	...	...	+=4; 0=1		...	...	0	...	0	0	(—)+	0	...	0	+	...	...	0	0	+	...	0	...	...	+	0	...	...	+=3; 0=9; (0)+=1.
6. Changes in number of hours or in subjects for teachers' certificates.	...	+	+	0	+	...	...	...	+=3; 0=1		...	...	+	...	0	0	(—)+	0	...	0	+	...	...	0	0	+	+	0	...	...	+	...	...	+	+=6; 0=7; (0)+=1.
7. Practice schools	+	...	...	...	...	...	...	+	+=2		...	...	...	...	...	...	...	...	...	...	...	...	+	...	...	...	...	...	...	...	...	+	...	+=2.
8. School clinic	+	...	...	...	...	...	...	...	+=1		...	...	...	...	...	...	...	...	...	...	...	...	+	...	...	...	...	...	...	...	...	...	...	+=1.
9. Measurements of efficiency	+	...	...	...	...	...	...	...	+=1		...	...	...	...	...	...	...	...	...	...	...	...	...	...	+	...	...	...	...	...	...	...	...	+=1.
10. New buildings	...	...	...	...	...	...	...	...	...		+	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+=1.
11. Affiliation with city schools	...	...	...	...	...	...	...	...	...		...	...	...	+	+	...	...	...	...	...	...	...	+	...	...	+	...	...	...	...	...	...	...	+=4.
12. Degrees in education	...	...	...	...	...	...	...	...	...		...	...	...	...	...	+	+	...	...	...	...	...	...	...	...	...	+	...	...	...	...	...	...	+=4.
13. Special short curriculums	...	...	...	...	...	...	...	...	...		...	...	...	...	...	...	...	...	...	...	...	...	+	...	...	...	...	...	+	...	...	...	...	+=2.

TABLE III.—*Tabulation of answers to questionnaire.*[1]—*The smaller colleges.*

Questions.[2]	Alfred.	Baker.	Baylor.	Bellevue.	Cooper.	Dartmouth	Dickinson.	Drake.	Earlham.	Fairmount.	Hanover.	Lawrence.	Marshall.	Middlebury.	Morgan.	North Dakota Agricultural.	Oberlin.	Otterbein.	Randolph-Macon.	Roanoke.	Rutgers.	St. Olap.	University of Southern California.	Swarthmore.	Tabor.	Kansas Wesleyan.	William and Mary.	Winfield.	Total.
1. Separate organization of department of education.	...	...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0=1.
2. Cooperation with other departments.	...	...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	+	...	...	+	...	...	+	...	+=3; 0=1.
3. Are these activities under department of education— (*a*) Special subjects in other departments.	✓	0	0	...	+	0	....	+	+	0	+	0	...	0	+	....	pr.	+	....	...	+	....	....	+	✓	+	0	+	+=10; ✓=2; 0=7.

(*b*) Physical education for teachers.	0	....	....	...	+	0	....	+	0	0	+	✓	...	+	....	....	0	0	....	....	+	....	....	✓	+	0	+	...	+=7; ✓=2; 0=7.
(*c*) Recommendation of teachers for positions.	+	+	✓	+	+	0	....	+	+	+	+	✓	...	+	....	✓	....	+	....	....	+	....	....	✓	+	+	+	+	+=15; ✓=4; 0=2.
(*d*) Inspection of State schools	0	....	0	...	0	0	....	0	0	0	....	....	...	0	....	....	0	0	....	....	✓	....	....	0	...	0	....	+	+=1; ✓=1; 0=12.
(*e*) Extension work for teachers in service.	+	....	✓	...	0	0	....	+	+	+	+	✓	+	+	+	....	✓	+	....	....	+	+	....	✓	...	✓	....	....	+=11; ✓=5; 0=2.
(*f*) Field work for advanced studies.	+	....	+	...	....	+	....	0	0	+	....	✓	...	+	....	....	✓	0	....	....	+	....	....	+	...	0	+	...	+=8; ✓=2; 0=5.
(*g*) High-school conferences on grounds.	0	....	0	...	0	0	....	0	0	0	....	0	...	0	....	....	✓	0	....	....	+	....	....	✓	...	0	....	....	+=1; ✓=2; 0=11.
(*h*) Summer schools	pr.	✓	+	+	0	✓	....	+	+	0	+	0	...	+	+	✓	0	+	....	....	+	....	....	....	...	+	0	...	+=10; ✓=3; 0=1; pr.=1.
(*i*) Educational surveys	0	+	0	...	0	0	....	+	0	+	+	✓	...	+	pr.	....	+	0	+	...	0	....	....	+	...	0	....	....	+=8; ✓=1; 0=8; pr.=1.
(*j*) Technological departments.	0	....	+	...	0	0	....	+	+	0	....	✓	...	0	+	....	0	+	....	....	+	....	....	0	+	....	0	...	+=7; ✓=1; 0=8.
(*k*) Graduate work in education.	0	....	+	...	0	+	....	0	....	+	....	....	....	+	....	....	+	0	....	....	+	....	....	+	...	....	+	...	+=8; 0=4.
4. Special requirements for master's or doctor's degree.	....	....	+	...	+	....	....	0	....	....	....	....	....	0	....	....	....	....	....	....	....	....	....	+	....	....	....	....	+=3; 0=2.
5. Changes in entrance requirements to education courses.	+	....	0	...	+	....	....	0	....	....	....	....	....	0	+	....	....	+	....	....	....	....	....	+	....	....	....	....	+=5; 0=3.
6. Changes in number of hours or in subjects for teachers' certificates.	0	....	0	...	....	....	....	0	....	....	....	....	....	....	+	....	....	....	....	....	....	....	....	+	....	....	....	....	+=2; 0=3.
7. Practice schools	....	....	....	....	....	....	....	....	....	+	....	....	....	....	....	✓	....	....	....	....	....	+	+	....	....	....	....	....	+=3; ✓=1.
8. School clinic	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....		
9. Measurements of efficiency	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....		
10. New buildings	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....		
11. Affiliation with city schools	+	....	+	+	....	....	....	+	....	+	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	+	...	+=6.
14. State board standards for teachers' certificates followed.	+	+	+	+	+	....	....	....	+	....	+	....	....	+	+	+	....	....	....	....	+	....	....	....	....	+	....	....	+=12.
15. Double standard for teaching certificates.	....	....	....	....	....	....	....	....	....	....	....	....	+	....	....	....	....	....	....	....	....	....	....	....	+	....	....	....	+=2.
16. Addition of new courses	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	+	....	+	....	pr.	+	....	....	....	+	....	....	....	+=4; pr.=1.

[1] KEY: +=Yes; 0=No; ✓=Doubtful interpretation; pr.=Proposed.

[2] For full reading of questions, see p. 507.

TABLE IV.—*Character of courses in education in certain normal schools.*

Location of schools.	School management.	General method.	Special method.	Rural education.	Psychology.	Practice teaching and observation.	History of education.	Principles of education.	Social and ethical education.	Principles of teaching.	Elementary education.	Secondary education.	School supervision.	School administration.	Classroom management.	Kindergarten.	Pedagogy.	Philosophy of education.	Science of education.	Education classics.	Comparative education.	Current problems.	Games and play, etc.	Industrial education.	Professional reading.	Thesis work.	Personality of teacher.	Sabbath school.	Business theory.	Monitor service.	Hygiene.	Deficient children.
Ala.—Troy	2	....	....	....	3	Yes.	3	....	....	....	....	....	....	....	3	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Ark.—Conway	....	1	1	1	2	....	2	1	....	....	....	1	....	1	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Cal.—Chico	....	....	....	....	1	Yes.	1	....	....	....	....	....	....	1	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	1	....	....
San Diego	....	....	....	....	1	....	1	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Conn.—Willimantic	....	1	....	....	1	Yes.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ga.—Athens	1	....	....	....	2	Yes.	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Idaho—Lewiston	....	....	(1)	3	2	Yes.	1	....	2	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ill.—Carbondale	1	1	....	....	....	....	2	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Charleston	....	....	(1)	....	2	Yes.	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Macomb	....	1	....	....	1	Yes.	1	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Normal	1	1	....	....	4	....	4	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Ind.—Terre Haute	....	1	....	....	3	Yes.	5	....	....	....	1	1	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Iowa.—Cedar Falls	1	....	....	1	4	Yes.	1	....	1	....	2	....	....	1	....	1	....	1	....	1	....	....	....	....	....	....	....	....	....	....	1	....
Kans.—Emporia	2	....	(1)	3	8	Yes.	7	....	2	....	2	2	....	....	....	8	....	1	....	....	1	1	....	....	....	....	....	....	....	....	....	....
Ky.—Richmond	2	2	....	....	3	Yes.	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	3	1	....	....	....	....	....	....
Me.—Farmington	1	....	(1)	....	2	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mass.—Bridgewater	1	1	....	....	....	Yes.	1	1	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Salem	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Worcester	1	....	....	1	1	Yes.	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Mich.—Mount Pleasant	....	....	....	3	4	....	....	....	....	2	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	1
Ypsilanti	....	....	....	....	5	Yes.	2	....	....	....	....	....	....	1	....	6	1	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Minn.—St. Cloud	....	1	....	....	1	Yes.	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Mo.—Cape Girardeau	....	....	(1)	....	4	Yes.	2	....	2	1	4	....	1	....	1	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....
Maryville	1	1	(1)	2	2	Yes.	2	....	1	3	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Springfield	1	2	(1)	1	3	Yes.	1	1	....	....	4	1	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Warrensburg	....	....	(1)	2	4	....	3	....	2	1	....	1	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
N. C.—Greensboro	2	....	....	1	2	Yes.	1	....	....	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Greenville	1	....	(1)	....	....	Yes.	....	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
N. Dak.—Allendale	....	2	....	....	1	Yes.	1	....	1	....	1	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....
N. J.—Montclair	....	....	(1)	....	2	....	3	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
N. Y.—Buffalo	....	....	(1)	....	1	Yes.	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pa.—Clarion	1	1	(1)	....	1	Yes.	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Lock Haven	1	1	(1)	1	1	Yes.	1	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Millersville	1	1	(1)	1	3	Yes.	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
R. I.—Providence	....	....	....	....	1	Yes.	1	....	....	....	....	....	....	....	....	6	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
S. Dak.—Aberdeen	1	....	....	....	2	Yes.	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Spearfish	....	1	....	....	4	Yes.	2	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....
Vt.—Castleton	1	1	(1)	....	1	Yes.	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

Va.—Fredericksburg	1	....	(1)	1	2	Yes.	2	2	2	....	1	....	....	....	....	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	1	....
Harrisonburg	1	....	(1)	1	3	Yes.	2	....	....	1	3	....	....	....	....	6	....	1	....	....	....	2	....	....	....	....	....	....	....	....	1	....
Wash.—Cheney	1	....	(1)	2	1	......	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
W. Va.—Fairmont	....	1	(1)	....	1	Yes.	1	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Wis.—Milwaukee	1	....	......	....	1	Yes.	2	....	1	....	....	....	1	....	....	7	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
River Falls	1	....	......	1	1	Yes.	1	....	....	....	....	....	1	....	....	....	1	....	1	....	....	....	....	1	....	....	....	....	....	....	....	....
Superior	1	....	(1)	....	1	Yes.	1	....	....	....	1	....	1	....	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Whitewater	1	....	......	....	2	Yes.	1	....	2	1	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....
Total	30	21	......	25	96	......	71	7	19	14	26	9	7	14	5	39	5	10	6	3	1	4	3	1	3	1	1	....	1	1	4	1

[1] Several.

Before generalizing from these totals secured from such a variety of different institutions some discussion of the particularly significant classes should be emphasized.

II. TEACHERS' COLLEGES IN ENDOWED INSTITUTIONS.

The teacher-training work of the institutions styled "Special universities, group *A*," differs in character, scope, and method of administration from the work of either of the other groups.

The following replies from Teachers College and the School of Education of the University of Chicago are of sufficient general importance to be quoted in full. It will be seen from these typical, but unusually clear, responses to our inquiry that some arbitrary interpretation of answers and comments must be made in order to condense into a statistical summary the main features of the data obtained from all the higher institutions.

Teachers College, Columbia University.—The account of the work and proposed changes at Teachers College contains items answering the questionnaire seriatim, especially the policy of markedly raising the admission standards, the significance of which for progress in teacher training will be readily appreciated:

(1) The work of Teachers College is already coordinated administratively with the other professional schools of Columbia University. Since its connection with Columbia University, Teachers College has ranked as a professional school, taking the same place in the university system as the schools of law, medicine, and applied science.

(2) By the organization outlined in paragraph one, Teachers College has its own faculty, the members of which devote their exclusive time to instruction relating to the training of teachers, supervisors, superintendents, and college and normal school professors of education.

(3) (*a*), (*b*), (*c*); each of these items is under the control of Teachers College.

(*d*) Not controlled by Teachers College.

(*e*) Work in extension teaching is controlled by a separate department of the university organized for that purpose.

(*f*) Not under control of Teachers College.

(*g*) There are frequent educational meetings at Teachers College, which include high-school associations of teachers.

(*h*) Teachers College has its summer school offering organized as an integral part of its work. Practically all of the faculty of the summer session is selected from the regular faculty of the college.

(*i*) The members of the faculty of Teachers College often take part in education surveys, but such work can not be said to be under the control of this institution.

(*j*) Teachers College has under its control regular departments devoted to instruction in household arts, industrial arts, school music, fine arts, physical education, and nursing and health.

(*k*) Graduate work in education is in charge of the school of education of Teachers College.

(4) The requirements for the master's and doctor's degrees for candidates specializing in education are outlined fully on pages 24–27 of the announcement of the school of education of Teachers College for 1913–14.

(5) Teachers College, in its school of education, has recently made marked changes in its requirements for admission to be in effect after July 1, 1914. The present require-

ments for admission are outlined on page 28 of the announcement of the school of education. The new requirements for admission after July 1, 1914, are outlined on page 29 of the announcement.

By these changes it will be seen that the school of education of Teachers College will become a graduate school after July 1, 1914, so far as preparation is concerned for teaching in secondary schools such academic subjects as English, history, Latin, French, German, mathematics, physics, chemistry, biology, or geography. After July 1, 1914, the school of education of Teachers College will receive as students majoring in these subjects only those who hold the bachelor's degree from an approved institution. This means that after July 1, 1914, all students received with a major in these subjects will matriculate for the master's or doctor's degree and diploma. The demands of the secondary schools throughout the country for increased preparation have made this new regulation necessary.

The school of education will continue, as heretofore, to receive candidates for the bachelor's degree specializing in elementary or kindergarten education, or in the teaching of household, industrial, or fine arts. After July 1, 1914, candidates for the bachelor's degree specializing in elementary or kindergarten education must offer for admission a record of at least two years of successful experience in teaching in addition to the requirements for admission now in force.

School of education, University of Chicago.—The report communicated from the University of Chicago is likewise illuminating and furnishes also in a concise statement another adequate and very important account of the work of teacher training which is representative of the best in the country.

Inasmuch as there was a radical reconstruction in the administration of many aspects of our work from 1909–1911 immediately after Mr. Judd became director of the school of education, there have been relatively few large modifications since. Some of the significant points in Mr. Judd's administration are the following:

1. For graduate work in the department of education, a prerequisite of two courses in education and one course in a related science was established. The master's essay has been made essentially a piece of minor research, objective in character and involving the use of three types of technique, namely, experimental, statistical, or historical.

2. For undergraduate students in the college of education the prevailing requirements of psychology and history of education were abolished and required courses in the principles of education and general methods substituted. These courses are taught by instructors who are versed in psychology and bring in as much of this subject as is needed for explanatory purposes.

3. As far as the history of education is taught, emphasis is placed upon the history of the development of school practice and organization in relation to changing social conditions. Special emphasis is placed on the development of American education in relation to general social changes. The courses along this line are given by a specialist in American history who is a member both of the department of history in the college of arts, literature, and science, and of the department of education.

4. As contrasted with certain other institutions, there exists the most intimate unification of the activities and administration of the college of education and of general university administration. The college of education conforms to all general university rules and is financially and academically as much an integral part of the university as is the college of arts, literature, and science. Hence, as regards the special activities referred to in paragraph 3 of the questionnaire, one may make the following statements:

(*a*) Teachers' courses in special subjects are given in the college of education by instructors who are primarily members of its staff, but also in most cases members of the faculty of the college of arts, literature, and science, where they also give courses.

(*b*) Physical education of men and women is a general university function, but some special courses in schoolroom gymnastics are given in the college of education.

(*c*) There is a general university appointment office for placing teachers which cooperates constantly with the offices of the college of education.

(*d*) There is a general university director of the relations with cooperating or accredited high schools who is also a professor in the department of education.

(*e*) Extension work for teachers is also a general university function. It includes a correspondence study department and a special college which gives down-town extension classes on Saturday and during late afternoon hours. The dean of this college is head of the department of natural science in the college of education.

(*f*) Field work is conducted largely in our own laboratory schools. Our high school numbers 400 students, and there is a similar number in the elementary school. A special industrial class is conducted in the high school; and a residential clinic for the study of psychopathic, retarded, and mentally-deficient children is now in the process of organization. These laboratory schools are regarded by the university in the same way as other laboratories and are supported accordingly.

In this connection there is one notable departure instituted by Mr. Judd which is worth mentioning. Most of the so-called experimental schools, from the time of Pestalozzi to the present, have been experimental simply in the sense that they varied the conditions of instruction. They seldom or never took the step of measuring adequately the results of the variations which they instituted. In our university high school and elementary school constant endeavors are made to measure the efficiency of the instruction. Upon this basis the efficiency has increased enormously in four years, and great economies have been effected. The most striking of these has been the reduction of the elementary school course to seven years without any elimination of content, thus making the combined elementary and high-school course 11 years instead of 12.

(*g*) Conferences of high schools in cooperation with the University of Chicago are held each spring at the university. These are organized by the director mentioned above in "*b*," and the proceedings are published in the School Review. Fundamental questions of adaptation of high-school and college work are discussed.

(*h*) The summer school is also a general university function. In this connection one of our chief problems is the organization of real graduate training for students who are doing all their work for the master's degree in summers.

(*i*) Educational surveys on a small scale are conducted by our graduate students in Chicago and vicinity all the time. These vary from surveys of typical city communities to surveys of rural counties. They constitute a favorite topic for master's essays.

(*j*) The maintenance of departments for training in home economics and household art and in æsthetic and industrial education has been historically one of the chief characteristics of colleges for teachers, and continues to be so in our college of education. No special training for music teachers is provided here.

(*k*) The department of education is a department of the graduate school of arts, literature, and science of the university, and is administered as any other graduate department is. The same criterion for advanced degrees prevails, namely, ability to use scientific methods in the investigation of specialized problems. As stated above, the emphasis is placed on experimental, statistical, and historical technique.

The general requirements for the bachelor's degree in the college of education are the same as in the college of arts, literature, and science. In this connection attention is called to the well-known University of Chicago entrance and junior college requirements which were adopted a few years ago. Members of the faculty

of the college of education were among the most influential of the members of the general curriculum committee of the university which formulated these requirements. In the senior college each student must pursue a major and minor subject known here as long and short sequences. If the student graduates in the college of education, one of these sequences must be taken in the department of education, and includes practice teaching. This makes from one-sixth to one-fourth of his work for the degree of a distinctly professional character.

College of Teachers, University of Cincinnati.—Through an interesting series of developments from voluntary teacher associations, through city training and normal training stages, on to departmental work in the city university, the work for teacher training in Cincinnati has this year culminated in the thoroughgoing, far-sighted organization of the college for teachers of the University of Cincinnati. The city board of education pays the salary of the faculty of this teachers' college, and the university provides a full four-year curriculum of well-articulated professional work leading to the degree of B. S. in Education. This full curriculum worked out by Dean Burris and his collaborators seems to set a desirable standard for institutions on similar foundations, and has many features which suggest a basis for mutual development and harmonization of university and public school interests which in some way any type of higher educational institution may well adopt. Further developments toward differentiated curriculums for elementary and secondary school teachers are in progress.

University of Pennsylvania.—The University of Pennsylvania within the year has received a legislative appropriation of $40,000 with which to move systematically toward a complete scheme of teacher training. Two new full professorships were at once created, one in history of education and one in educational administration, and appointments have been made. It is confidently expected that the State's interest in the better equipment of its teachers thus indicated will be even more marked from year to year. Pennsylvania is a State which can ill afford to delay work of this sort.

School of Education, University of Pittsburgh.—Another one of these "special universities" deserving special mention is the University of Pittsburgh, with its progressive and fully equipped school of education. The plan for furnishing practice teaching is notable. The report of this work reads:

> Perhaps the most characteristic thing we are doing is the practice teaching. You will note from our literature that we require daily schoolroom experience throughout our junior and senior years, which counts for one-fourth of the required work of those two years. I feel that our scheme of cooperation, which secures the highest type of practice teaching for us and a large amount of free instruction for the secondary and other schools of the community, is the best kind of practice teaching I have ever seen. We try to go beyond the mere perfunctory requirements of so many hours' teaching. The teaching is actually of a very high grade. The supervision is first-class and as frequent and as constant as necessary, and in most cases our practice

teachers rank close to the best regular teachers of the faculty of the schools in which they teach.

This particular plan, developed at Pittsburgh, has been adopted at Fairmount College, Kansas, and elsewhere.

The school of education of Pittsburgh also announces the establishment of a new type of high-grade school for little children, called "The school of childhood," which is to embody the approved features of the kindergarten, the playground, and the Montessori school. The program is based upon four fundamental instinctive activities, which reach out readily into the subject matter of the elementary school; (1) *talking or communicating;* informal conversations are held which lead to stories selected from the best literature, by means of which good habits of speech are acquired unconsciously; (2) *nurturing;* indoor and outdoor gardening, birds, an aquarium, and some pets are provided and house plays with dolls are emphasized; (3) *constructing;* all modern play materials of educational value are furnished; (4) *exploring;* carefully planned excursions are made, exploring impulses are met in change and growth in play materials, and the development of the child's body is noted by himself. Tests and measurements of the child's physical development are taken. The school is directed by a play leader and a number of trained helpers.

There is, it should be noted, an older but equally unique model elementary and kindergarten school well established at the University of Missouri.

New developments might be noted and proposals of interest described at Cornell, Leland Stanford, and other universities of this class. Those noted above are perhaps the most striking and significant.

Division of education, Harvard University.—Harvard University reports notable additions to its staff of professors of education, a general increase in number of courses, and a particularly notable expansion of its graduate work; four new graduate seminary courses were added during the year.

Since 1912 the division of education and the city of Newton have joined in a unique and important educational enterprise—the maintenance of a fellowship for research in education, the incumbent to be a member of the staff both at Newton and at Harvard, and to organize and conduct investigations and experiments in the Newton schools and with the active cooperation of the Newton teachers. This fellowship is the Joseph Lee Fellowship for Research in Education.

As a result of these advances the division has undertaken several new enterprises of general educational interest. The first volume of Harvard Studies in Education is to be published by the Harvard University Press in the course of the year; it will be a study of the social and professional organization of the teachers of Germany. The Harvard-Newton Bulletins are planned as a series to embody the results of the work done in Newton under the Joseph Lee fellowship. The division has made good progress toward the foundation of a school under its own control and administration, as a model institution. It is also engaged, at the invitation of another department of

the university, in a study in the field of college education which offers important new opportunities for valuable research. The general opportunity to undertake research and to be of service to the schools and to educational organizations is now, of course, much broader than before.

This progress suggests the hope that the division of education at Harvard University may eventually achieve the goal toward which all university departments of education should strive—the establishment of the study of education and the training of college-bred teachers in an independent graduate school.

III. STATE UNIVERSITIES.

Twenty-four State universities responded to our questionnaire, in most cases at some length. It is significant that eight of these report affirmatively on the first and critically important question regarding the administrative status of schools of education in universities. This affirmative response indicates the desire rather than the fact in some at least of the cases. As a matter of fact, these organizations of schools of education are in many cases paper organizations, and not in a genuine way coordinate with other professional schools of the university. Apparently there is not one of them in which the director or dean has administrative authority over the itemized budget of instructional costs for all the instructional and other work of the students registered. A dean or director of a school of education is presumably responsible for the instruction in his school. Responsibility for instruction and professional interests generally would seem to demand a corresponding authority in budget matters such as engineering schools and medical schools enjoy. Schools of education in most State universities have not, however, reached this stage of differentiation. They "borrow" from the college of liberal arts or from other professional schools what service they can get. With these pseudoprofessional courses and their own education courses, they patch up a paper curriculum. Teachers' courses in special branches, as the fifth annual report of the Carnegie Foundation showed, are in most cases merely a relisting of ordinary courses as "courses for the training of teachers" (p. 75). Teachers' courses "borrowed" in this way are apt to be meaningless and functionless. Dean Russell, of Teachers College, who admits what a separate budget has meant for Teachers College, says that he does not look for any striking and vigorous development of schools of education in State universities until this elemental principle of university administration is observed. There are evidences that progress along this line is imminent. It is significant that 8 of our 24 universities reported "steps looking toward" this important readjustment of administrative responsibility and authority, and one other reports "proposed steps pending."

Cooperation with other college departments.—The majority reporting on the question upon this subject state instances of effective cooperation of schools of education with other professional schools or semi-independent technological divisions of university work. There are illustrations of this cooperation with all these departments cited in the question, and, in addition, with such departments as home economics, engineering, and fine arts. The most frequent examples of cooperation are with agricultural departments.

At the University of Missouri the medical school and the school of education work very closely together in a course in preventive medicine. In the dissemination of this information the school of education is of the greatest importance.

Activities under the control of departments of education.—The significant fact is that 21 of 24 universities report teachers' courses. This means that in some way the academic departments are professionally cooperating with schools or departments of education in furnishing to intending teachers the special methods and peculiar technique, as well as more fundamental educational principles and distinctive values of the actual subjects the students will teach when they take positions in the schools. The proper coordination of the university forces contributing to teaching efficiency is the curriculum problem for the immediate future in university administration. At present the solutions are about as numerous as the institutions concerned.

The following note with reference to some characterization and standardization of teachers' courses when properly organized into a professional curriculum for teachers is taken from a bulletin of the University of Kansas school of education:

The items enumerated below are suggestive of the kinds of topics with which the following 19 (Kansas University) teachers' courses in special branches are concerned:

1. A simple statement of the broader aspects of the distinctive field of education, indicating the special adjustment of the moral, æsthetic, social, and practical disciplines to be reasonably expected from a study of the subject.

2. A brief sketch of the actual history of the subject in the school curriculum, showing the gradual change and improvements in the textbook presentations of the subject, and the gradual improvements in other apparatus than textbooks, adopted for use in teaching it.

3. The gradual change in the conception of its educational value and the degree and nature of correlation with other subjects, particularly since the report of the Committee of Ten.

4. The growing refinement of methods for presenting the subject.

5. The grade preparation to be presupposed at present, its present status, as seen from a comparison of typical high-school curriculums, together with the social, psychological, and practical obstacles to its attaining its ideal educational aim.

6. The necessary, and also the more ideal, preparation called for in the teacher, academic and professional.

7. References to books and special monographs dealing with the topics of the course, and a suggested list of books desirable for reference for high-school libraries.

Data received in reply to the questions indicate that in many cases the recommendation of teachers for schools, the inspection of schools, and the direction of summer schools are administratively a division of the work of schools of education. In many other cases the work is done by the same men, although organized as a more general university function. A noteworthy fact is the large and rapidly increasing number of institutions whose schools of education maintain high-school conferences and summer schools or conduct education surveys. Of the 28 universities, 21 report graduate work.

Psychological clinics and efficiency measurements.—The school of education of the University of North Dakota reports the establishment this year of a psychological clinic, which is to be conducted in connection with the psychological laboratory. As Table I indicates, a similar organization is under way at Chicago University. From the University of Oklahoma comes news of a new department of "Measurement of Efficiency and Standardization," in charge of the school of education. Mr. S. A. Courtis is the "consulting director." The special practice teaching regulations reported in full from the University of Oregon are thus summarized:

> We consider the practice teaching most fundamental. This is supervised by the department of education, but with the cooperation of the various departments. The actual cooperation of the various departments in their special subjects has been instrumental in spreading the professional attitude through the faculty which has resulted very profitably and pleasantly to all concerned.

Changes in requirements for admission and for graduation.—The replies to our questionnaires disclose several instances of advance in both admission standards and requirements for certificates, and also one instance of lowered standards by the introduction of a short normal curriculum.

Among the items which seem to indicate notable progress the following may be quoted from the University of Tennessee:

> A State law in effect 1914 requires six half-year courses in education for university graduates to entitle them to first-grade professional high-school certificates. Heretofore the rule was that only two three-month courses in education must deal specifically with secondary education.

From Wyoming is reported the regulation of "25 semester hours in professional work in a four-year course for high-school teachers receiving the B. A. degree in education." University of Virginia reports, "20 semester hours are required for the State certificate."

Graduate work in education.—The Universities of Illinois and Wisconsin report great increase in graduate study in education, and they cite special requirements, which have been worked out with care, specifying how the master's degree in education may be won partly in absentia. The records from other universities show the same thing. It seems that the master's degree in education is practically a teach-

ing degree, sought and won in increasing numbers chiefly by those who have ambitions for special equipment for teaching and administration, but whose penchant is not for college positions ultimately, and whose professional advancement does not allow or call for the work usually demanded for the doctorate. The problem of properly providing for and adequately directing graduate work in education by study in summer schools only is acute and general. The demand can not be adequately met with present provisions. (See last table.)

The University of Washington outlines a policy for this type of advanced graduate work in education during regular and summer sessions which raises the issue:

> The most unique feature is in the organization of the graduate work in the school of education. We have provided that candidates may plan for a three-year course beginning with the junior year and including a year of graduate work. For these three years of work they would receive the bachelor's degree in either the college of liberal arts and sciences or the school of education, and the master's degree in the school of education. The additional year of work required for the master's degree is designedly not overspecialized. It is intended to be extensive rather than over-intensive. A rigid examination will be required in the work of education, in the academic major, and in the two academic minors, but no thesis will be required. It is not intended to make this year one of specialized, but rather of thorough scholarship in education, and in one academic major subject, supported by two academic minor subjects. The intention is to make our school a genuine professional school on a par with the school of law in the university.

Activity in building.—One of the most striking instances of progress in teacher training is the simultaneous erection of buildings for schools of education in seven southern universities, each building being provided from the Peabody fund and each university recipient being under obligation to expend annually upon teacher training a minimum of $10,000. If the institutions carry out faithfully the intention of such beneficence, it is reasonable to expect that the type of teachers in southern high schools will be much better. This impetus to teacher training is also of critical significance to the whole future development of State universities in the South. These institutions as a rule have not seemed to respond to the call for definite professional service to the State at large as effectually as the western universities have. In this connection should be associated the development of the Peabody Teachers College, which has ambition to become for the South what the Teachers College and Chicago School of Education are to their respective sections of the country.

Among the important building and equipment items are to be noted especially the model training high schools which are now under construction at the Universities of Wisconsin and Illinois. The one at Wisconsin is to be known as the Wisconsin High School and will be ready for occupancy by February, 1914.

Other evidences of progress.—Another sign of progress is the enlargement of museum, laboratory, and library equipments and appointments. Typical of the items reported, but exceptional in its unique value, is the report that:

> The pedagogical library of the late Prof. Aron has been purchased by the University of Illinois for its school of education. It comprises approximately seven thousand titles and is especially rich in documents relating to German education in the sixteenth and seventeenth centuries. It contains also rare first editions of the educational classics and a number of valuable manuscripts.

There are certain other items of interest from these activities of State universities which should be briefly mentioned. The University of Kansas reports that:

> There is pending in the University of Kansas a proposition to organize a course of two years for the training of directors of physical education, superposed on the college work. The proposition is to coordinate theoretical and practical work in such a way as to justify the conferring of the bachelor's degree in education.

There is strong likelihood of a similar development at the University of Illinois. Some significant steps in this direction have been taken.

With all these interesting items of progress and many more of the same sort, and with the eagerness to maintain a high professional integrity and high ideals on the part of the professors of education, one can not fail to realize, nevertheless, that State universities are not really responding adequately to the great opportunity open to them in this field. A natural academic conservatism is good to fight against, but the opposition to proper equipment and more particularly to separate organization for schools of education now appears to denote on the part of many men in college faculties a fear of conflicting interests rather than a conviction regarding the function of a State university.

IV. THE SMALLER COLLEGES.

The smaller colleges in the main administer conservatively the traditional liberal arts curriculum. It should be kept in mind, however, that teacher-training is the only kind of professional work attempted, and that it is only on this basis, or pretext as the case may be, that such institutions maintain a status and secure official recognition by the State in whatever professional preparation of high-school teachers they may do. Many of these institutions report that the majority of their graduating classes are preparing for teaching. Many use their annexed academies as practice schools, and it will be noted in the table that many report the development of teachers' courses. Few are attempting graduate work. Dartmouth College and Dickinson College, of those reporting, seem to be exceptions in minimizing their teacher-training functions. Dickinson reports "a single elective" course, and Dartmouth, with a large enrollment

and status as a semi-State institution, provides no department or separate instructor in the field of education as a college study.

The table shows that the smaller colleges, as a rule, are responding to the modern demands for trained teachers in the same way as the universities. They utilize means of cooperating with other departments, do extension work for teachers, hold school conferences, maintain summer schools chiefly for teachers, and in a surprising number of instances conduct surveys. It will be noted that six such institutions have effective affiliations with city or village public-school systems and are providing the practice and observational facilities so essential to effective work in educational departments. One other interesting teacher-training activity, which will be mentioned later with reference to normal schools also, is that of an institutional policy of attempting to "follow up" the work of their alumni as teachers in the schools.

In many cases these colleges must be "standardized" by the State board before their graduates may be "certificated to teach" without examination. This relationship brings about, as the answers to question 6 indicate, the policy of conformity to State certificate laws in the teacher-training courses. The result is that the smaller colleges are important professional schools, and many of them could not otherwise exist. This official status as licensed teacher-training institutions suggests that the State board might be provided with the proper means to accomplish the much-needed standardization. In Kansas the State board of education has a commission at work on the preparation of a "manual of college standards," a guide to the State college visitor in his work of inspecting the State's higher educational institutions whose teacher-training curriculums must be approved. Such State efforts might well perform local service for the standardizing bodies of wider scope, such as the North Central Association, the Association of American Universities, the National Association of State Universities, and the United States Bureau of Education.

Two other items deserve special mention in the teacher-training work of these colleges. Rutgers College seems to be taking its teacher-training function seriously. A part of its report is as follows:

> Steps looking toward progress in teacher-training taken by the department of education of Rutgers College point along four general lines:
>
> 1. The reorganization of the courses in educational subjects into definitely planned curriculums of study designed for the professional training of secondary-school teachers.
>
> 2. The establishment of a summer school for teachers. During the summer of 1913 more than 300 New Jersey teachers already in service attended the school, taking professional subjects required by the State for teachers' certificates. The school was supported by an appropriation of State money. It was organized as a part of a more comprehensive movement in the State in connection with four other summer schools for teachers.
>
> 3. The establishment of extension courses at the college and in other centers for the training of teachers already in active service in professional subjects of study.

4. An attempt to cooperate with the work of the State department of public instruction and with the work of the various educational institutions of the State.

Swarthmore College reports the following high aim for educational work:

The new department is being organized on comprehensive and scientific lines around the central aim of thorough preparation through intelligent participation and experimentation in school work. On every hand the aim will be to emphasize the modern empirical and scientific points of view in psychology and education. Therefore, experimental laboratory courses will be given in both these fields in order to make the work concrete, definite, and scientific. In order to connect theory and practice and to formulate principles of education, all theoretical and historical courses will be paralleled by work in school observation and practice teaching and in experimental education in contemporary school problems.

It is perfectly clear from the foregoing that the small colleges, even the denominational ones, particularly in the West, are largely teacher-training institutions; several report that two-thirds of their seniors are looking forward to teaching. The small colleges in Kansas yearly train as many high-school teachers as the State university. In all States some of the small colleges are of low grade; some do merely normal-school work in their educational departments; and others are poorly equipped. All this emphasizes the force of the contention that their professional service should be recognized and standardized by the States, at least in respect to teacher-training.

V. NORMAL SCHOOLS.

A letter was addressed to presidents of normal schools requesting accounts of recent progress. Sixty-nine very full and satisfactory replies came from 33 different States. One need only read these letters to be persuaded that the cause of teaching is an impelling one and will prosper. The replies contain a bewildering number of items of significance, difficult to classify, and practically impossible to put in tabular form, even the sort employed for data from colleges and universities. Normal schools still are, at least for the different States, individualistic. Perhaps the first impression one gets from these letters is that the normal school leaders are severally at work in entirely different sections of the field. There is a need, if not for some delimitation of function, certainly for some distinguishing standard with which to classify institutions so different, yet bearing alike the name of "normal school." It is true, indeed, that some are changing this name and with it the distinctive features of the traditional normal school. "Normal university," "teachers' college," or "normal college" would seem to refer to an institution different from the institution whose best descriptive name is still "normal school," and quite as different in form and function from the school of education of a university or the department of education of a liberal arts college.

Typical statements of progress.—The latter distinction is well made by the following important communication from Teachers' College, Greely, Colo. The communication has valuable comments on developments in teacher training; the item with reference to graduate work and a graduate degree is particularly significant.

1. A course in biology and one in sociology has been put in the list of professional courses required of all students, these courses to be regarded as coordinate with psychology. We are entering upon the second year of this arrangement. The new courses in biology and sociology that have become required courses are not of the traditional type, but represent selections and organization of subject matter in these fields with special reference, as has been the case with older courses in psychology, to the fact that the students are headed toward the profession of teaching.

2. The idea of the major has been introduced into our professional training. We are now entering the second year of this arrangement, except that there have long been special courses for the training of teachers of kindergarten, manual training, physical education, domestic science, music, and art. The idea of the major is now extended to all departments and is especially fostered in the work of the third and fourth years. Especially significant is the application of this idea of the major to the vocational problem as over against the subject-matter conception of the major. This you will notice especially in our plan for majors in primary teaching, intermediate grade teaching, grammar grade teaching, elementary school supervision, high-school supervision, public-school supervision. In all of these majors actual practice work is required over and above that which is common to all of our students, and this practice is in the specific field indicated by the major; also a higher standard of teaching ability is necessary to earn the designation of major, which carries with it the presumption of higher training in the professional activity indicated.

3. Marked emphasis is placed upon the scientific examination of children in the training school, the work being conducted by an expert trained under Dr. Witmer. Also courses have been developed in clinical psychology, psycho-clinical practice, and mental hygiene—the last so recently differentiated (though not new to our work) that it does not appear in our last catalogue. They will now be offered as distinct courses in the department of psychology.

4. Graduate work in professional lines was begun this year, such work to lead to the degree of master of arts in education and to conform with the usual or standard requirements for the degree in other colleges. Emphasis will be laid upon the organization of this graduate work for each candidate for the degree in terms of direct relationship to actual or prospective vocational needs. At the same time there are certain general requirements calculated to insure professional breadth in the fundamentals of biology, psychology, sociology, educational principles, and current educational problems.

5. A start has been made on the difficult problem of education with reference to sex, some work having been done in the elementary school and in the high school that is more than that of occasional lectures. Methods are investigated of introducing the subject to prospective teachers of children. In the meantime considerable attention is given to the topic in its setting in other courses such as biology, psychology, sociology, physical education, hygiene, and education.

6. The museum idea in this institution, though not new, is worthy of special mention. We have an abundance of museum material, located where it is of most immediate use, i. e., mostly in connection with the classrooms of the various departments. There is here no museum as a curiosity, a place to be visited occasionally, generally under lock and key. A part of the museum idea is pictures and statuary everywhere that appropriate places can be found; also gardens, poultry yards, trees, flowers, shrubbery, beauty of environment. These are all to be used for educative purposes

and practice teachers are directed and encouraged to draw upon these museum resources.

The report from the State Normal University, of Normal, Ill., states in even more specific terms the somewhat extended field in which this particular institution proposes to work, notably, the preparation of secondary teachers.

It is the purpose of this institution to train every sort of teacher needed in the public schools of Illinois from the kindergarten through the high school; hence the State Normal University is organized in four schools:

1. The teachers' college, to prepare high-school teachers, supervisors, principals, and superintendents. In this school four-year programs are provided, leading to the professional degree of bachelor of education.

2. The normal school, to prepare teachers for grades, elementary schools, rural schools, and village schools. It provides for high-school graduates programs two years in length for upper-grade teachers, for lower-grade teachers, for kindergarten-primary teachers, and for special teachers of agriculture, art and design, public-school music, manual training, household art, and household science. Programs from three to five years in length are provided for students who are not full high-school graduates.

3. The university high school to serve as a school of observation and training for students in the teachers' college.

4. The elementary training school, consisting of the kindergarten and eight grades to serve as a model school for observation and training for students in the normal school and teachers' college.

We have also a country school department, in which a two-year program is provided for graduates of the eighth grade who are not less than 16 years of age when admitted. Also a one-year program for graduates of the tenth grade. Upon the completion of these courses these elementary students may obtain a third-grade teachers certificate in the public schools of Illinois, and upon the completion of three years' additional work may receive the normal-school diploma.

In the advancement of this program we have secured as a school of observation and training for the country school department the cooperation of the Walker School, 6 miles south on the trolley line. The school has the best building of all the one-room country schools in McLean County. We have placed in charge Miss Eula Atkinson, of Montgomery, Ala., formerly a teacher in the State Normal School at Jacksonville in that State. The teacher's salary, $1,200, is paid in almost equal amounts by the local district and the State Normal University.

In further development of our agricultural department we have secured an appropriation of $22,000 for farm buildings and stock for the normal university farm of 95 acres. It is intended to demonstrate upon this farm good farm methods in raising farm crops and care of live stock. The legislature has also provided funds for the opening of a commercial department for the training of teachers of commercial branches for the high schools of Illinois. This school will be opened the summer of 1914.

The report from the "Michigan State Normal College, Ypsilanti," gives another account of progressive movements which in several items are similar to those reported above, notably the reorganization into differentiated curriculums of the programs of study offered, and the attempt systematically to deal with the critical and delicate problem of the teaching of sex matters in the public schools. The item, however, which is of the greatest interest is the reference to the legis-

lative policy of permanent development covering a period of seven years.

One feature of the normal college which is worthy of mention is the opportunity which it offers for specialization. About one-half of our 1,500 students are taking what is termed the general course. The other half are what are known as specializing students. Specializing courses give students an opportunity to follow to some extent their individual tastes and to prepare themselves for the special lines of work in a public-school system. The principal departments in which specializing is done are home economics, physical education, kindergarten, primary, music, drawing, manual training, commercial, and secondary education. Under secondary education, students may specialize in any line of high-school work.

In addition to these specializing courses covering two or three years, the college offers courses leading to the B. Pd., and the A. B. degrees. The former degree is given to those who have done three years of college work and the latter to those who complete the full college course. The State Normal College stands second to the University of Michigan in the preparation of teachers for Michigan high schools. To meet more fully this increasing demand for high-school teachers, the college expects to place more emphasis on the training of secondary teachers.

The college is also experimenting in extension work. Last year the teachers of a city of some thirty thousand requested extension lectures for which credit would be given at the college. A course of lectures was given through the year with very gratifying results. Requests from other cities have been received this fall, and it is likely that more than one course will be offered during the present year.

During the past few years several movements looking to the welfare of the students have been inaugurated. Most worthy of mention are the creation of the office of dean of women, the employment of a college nurse, and the establishment of a college infirmary. These have added greatly to the well-being of our students.

In order that the opinion of the student body might have an influence in the administration of the college, last year the faculty council authorized the establishment of a student council, to be composed of representatives from the college classes from the Young Men's Christian Association and the Young Women's Christian Association, elected by those organizations. The student council has already fully justified its creation.

It may be of interest to know that for five years the normal college has offered a course in sex hygiene. This course has been elective for young women, and it is worthy of note that over 800 have elected the course. In almost every class there has been an attendance beyond the reasonable limit of the classroom, and in many instances more students applied for the course than could be taken care of.

Like nearly every educational institution, the physical equipment of the normal college has never been equal to the demands placed upon it. Friends of the institution are greatly cheered by the fact that the Michigan Legislature of 1913 voted an appropriation of $100,000 for seven consecutive years for buildings and grounds.

Two accounts of the characteristic developments which may be expected in the typical normal school as distinguished from the exceptional institutions quoted above are given below. The first comes from the Winthrop State Normal and Industrial College of South Carolina.

For general training:

We have increased the time given to practice teaching fully fivefold.

We have organized and conducted under expert supervision a mixed school such as will be found in sparsely settled communities which do not afford enough pupils to

justify employment of more than one teacher, or to make it possible to form every grade every year.

We have offered courses of study to prepare teachers for community work in rural communities. Teachers taking these courses are fully prepared to take charge of classes in elementary agriculture, in domestic science, and in domestic arts.

We offer courses preparing teachers for the high-school business courses, such as stenography, typewriting, and bookkeeping.

We have organized and conducted with full expert teaching force a school for training in all needs in a country home. Every detail of work needed in the home is made part of the school curriculum. This school is carried on as an independent organization, not an annex to some other line of work.

We are offering to those teachers of the State who have not had an opportunity to secure college training a one-year teachers' course. Anyone holding a valid county teachers' certificate is entitled to take this course. Those completing it will receive from the State board of education a certificate good for five years. The course is so arranged that teachers desiring to take it can attend for one term of 12 weeks, if they so desire. This enables them to come without interfering with their work as teachers.

The following letter, similar to the above, is likewise representative of the great majority of reports of normal-school progress in teacher-training. These items are from the Millersville State Normal School, of Pennsylvania:

First. In classifying students who enter this normal school from high schools, we hold strictly and rigidly to the rule that graduates of recognized third-class high schools may enter the freshman year without examination; that graduates of second-class high schools may enter the sophomore year; and that graduates of first-class high schools may enter the junior year on the same condition.

Second. Correlating the high-school course with the normal-school course. Every graduate of a high school of recognized standing is given an application blank to be filled by the high-school principal. Whenever the work done in the high school is equivalent in quantity and quality, as judged by this record, to the academic requirement in the normal course, full credit is given. In this way graduates of first-class high schools may complete the normal course in two years, graduates of second-class schools in three years, etc.

Third. The maximum of 18 or 18¾ hours of work per week is set by the authority of this school whenever such work requires out-of-class study and preparation. The student may add some handwork.

Fourth. A special course in rural-school methods and rural-school problems will be given for the first time during the school year 1913–14.

Fifth. Equipment. For the teaching of the sciences three complete laboratories are ready for use, which were remodeled and equipped during the summer of 1913. Heretofore there was but one laboratory. We designate them the biology laboratory, the chemical laboratory, and the physical laboratory.

Sixth. The manual-training department has been modified to include domestic art. The ladies of the school spend at least two-thirds of the school year in manual work, half of which is devoted to handwork for the grades under the head of cardboard construction, raffia, etc.; the other half is given to making garments.

Seventh. Financial. For the first time in the history of the school a definite budget system has been adopted by the board of trustees.

Eighth. Summer school. For the first time in the history of this normal school a regular summer school was conducted, beginning June 30 and continuing six weeks. Ninety-seven students were registered. The course offered included many of the regular course subjects, as well as several additional branches to suit the varying

demands of the students. The school has been particularly helpful to teachers, prospective teachers, and students. It has been the means of removing conditions imposed on many students who are ready to enter the studies of the senior year. After the close of the summer school the board of trustees voted to continue this policy.

Coordination in theory and practice.—Nine normal schools report an increase in the students' hours required to be devoted to practice teaching. Fourteen schools report plans just adopted whereby there may be closer affiliation and cooperation between the regular staff of teachers and the practice work. These reports indicate a shifting of emphasis from the scholastic development of pedagogical theory and educational science to the development of that educational theory and science which the instructor can illustrate in the model school. The State Normal School, of Wayne, Nebr., expresses the principle thus:

> In this institution we are following the plan of having one man as head of the training department, which includes the theoretical as well as the practical phases. All critic or training teachers are under his supervision, and all instruction along the lines of psychology, child study, and history of education is given or directed by him. This brings a unity which can not be had when the theory and practice are not controlled by the same individual. It avoids the embarrassing situation of occasionally having the theory and practice at cross purposes. I feel that it is a very decided improvement over the old plan of having a superintendent of practice and two or three heads of the theory department.

The principle seems to be so important that an additional citation may be added from the Southwestern State Normal School, Oklahoma:

> I question the value of the heavy courses in the history and philosophy of education, as well as the value of much of the alleged pedagogy carried in the curricula of many normal schools. The normal schools need to slough those courses which merely serve the purposes of pedantry. They need to descend to their problem and meet their students on the level of their needs. They need to give the students something which can be used in teaching. Furthermore, I seriously question whether a majority of those teachers who carry the academic work of the normal schools are doing their work in accordance with sound pedagogy. As a corrective for these conditions we have devised in the Oklahoma State normal schools a series of courses known as pedagogy by demonstration. It consists of lessons conducted with classes of children in the presence of the class in pedagogy by the heads of departments. Some of these gentlemen complain that they are compelled to do a great deal of extra work. Nevertheless, I am pleased to report that this work seems to be the making of some of them, as well as of great practical value to the students.

Affiliation with rural schools.—Rural practice and demonstration schools, or schemes for affiliation with near-by farms, seem to be indispensable accessories to a certain type of normal schools. Seven normal schools report this equipment added within the year; one reports a "vocational model school," and one a reorganized model six-year elementary and three-year intermediate school. The following communication from Iowa State Teachers College suggests the educational significance of these ventures:

The most recent thing that we have done at this institution is to start the plan of organizing demonstration country schools. One of these schools is in an independent district, and we exercise supervision over the school and pay part of the salary of the teacher. This is used for observation and to demonstrate what is possible in country school work. We expect to secure the cooperation of a whole township near the campus of the teachers' college in which to make this sort of development of country school education. It is not our intention to reorganize these schools by consolidation or any other method, but by putting in them well-qualified teachers and giving them expert supervision to prove that there is no better school than a well-managed country school.

We have also organized rural school training classes, called normal courses of county certificate standard. Special attention is given to this class of students by a committee of the faculty under the direct management of the professor of rural education.

We are also beginning a course of study under the title, vocational normal course. Furthermore, we are organizing centers in which members of the faculty meet the teachers of any township or community and give from two to three lessons each week, such work being done on Saturdays. These centers are to be maintained specially for the benefit of country school teachers, but centers for city school teachers also will be organized. It is not expected that anything more than expenses will be charged these centers for such work.

The State Normal and Training School, of Cortland, N. Y., has equally unique and original features:

During the past two years this school has developed a curriculum for training teachers of agriculture in secondary schools. The curriculum, which covers a period of two years, requires college preparation for admission, and only young men who have had farm experience are admitted to the course. General work in the theory of agriculture is given in addition to shopwork in wood and iron and in the theory and practice of teaching.

The unique feature of the course is that all experimental work in the way of farm crops, fertilizers, dairying, etc., is carried on in accordance with our specifications and for our benefit by neighboring farmers in return for advice and help given them by teachers of the school. The students in this course are in demand as speakers before neighboring granges, and the experience that they get in mixing with practical farmers has proved to be of the greatest service to them in their subsequent experience as teachers, for it is plain that if secondary courses in agriculture are to succeed the teacher must have the support of his farmer neighbors as well as of their sons.

All experiments are continued during vacations, and results are checked by a member of the faculty who is employed for 12 months in the year.

Graduates go out with courses of study definitely outlined by topics. They know what they should teach to high-school students, what equipment should be purchased with a given amount of money for the installation of courses in agriculture, and where this equipment may be secured to the best advantage. The diploma is a life license to teach agriculture in the schools of the State of New York.

In addition to these vigorous forward movements for increasing the efficiency of rural education, it is significant to note that 16 normal schools report recently effected affiliations with near-by school systems to the end that the latter may be used for practice and observation. Eight of these affiliations are with city school systems, and eight are with rural schools; two other normal schools are acquiring school farms and two are systematically utilizing near-by

farms for purposes of training teachers for rural schools, a plan strongly advocated by efficient workers in the field of agricultural education, notably Dean Eugene Davenport, of the University of Illinois.

The following from the Chico State Normal School, California, suggests a method of affiliations with rural schools:

> During the past year we have introduced, as a part of the actual experience in our training school, a two weeks' apprenticeship in the rural schools of this vicinity for every student-teacher. Two student-teachers are assigned to each rural school in the morning and two in the afternoon. They do whatever work is assigned to them by the rural-school teachers, who are in turn directed by our directors of extension work. This relationship has proved of value to the rural schools, and it has supplied to our students the necessary familiarity with the important aspects of rural-school administration, and some experience in dealing with them. We think it is the most valuable two weeks that they spend in the normal school, and we feel that it, or something like it, is a necessary element in the training of any teacher who proposes to take up rural-school work.

In addition to the above items specifying progress in teacher training for rural schools, 15 normal-school presidents and 2 State superintendents of public instruction report recently instituted plans for special courses of study and differentiated curriculums for improving the quality of rural education.

Affiliations with city public schools.—A paragraph from the "plan of affiliation" adopted by the Fresno (Cal.) State Normal School will illustrate the city school affiliation plan:

> By special arrangements with the Fresno city board of education, our practice teaching is done in the public schools. A number of the city teachers are selected for their special fitness, and to each are assigned two cadet-teachers for an hour on every school day. These city teachers are paid from the normal funds $120 each per annum in addition to their regular salaries. The head of the training department in charge of the upper grade work and his assistant in charge of primary work have general supervision over the training of teachers. Each day they meet the student-teachers in their respective departments, and give an hour's instruction in theory and methods. They also hold individual conferences with students as occasion suggests. Each student is required to take the theory and practice for both primary and grammar grades. Several ungraded classes are available for special training in handling schools comprising several grades.
>
> In this scheme all theory and methods are given directly in connection with practice teaching, each subject being specially considered at the time the student-teacher is handling it in the classroom.

Schools for observation.—A pedagogical issue is raised by 13 different normal-school presidents which seems to merit serious thought and well-considered plans for scientific testing. These men write of a change in policy looking toward providing for intending teachers better and more distinctively observational or clinical facilities as preferable to mere practice facilities. The report from the Milwaukee State Normal School represents and well expresses the common sentiment of the 13 who comment upon this point:

The particular step which the Milwaukee Normal School has taken this year has been to change its practice school to a model school. Hereafter, instead of using the school as a place for the normal-school students to do practice teaching, the students will visit the school by regular assignment, for the purpose of observing methods of instruction and management. Substantially all the work of the school will be done by skilled teachers employed on account of their supposed ability to conduct the daily exercises of a classroom in a manner worthy of the study of young people who are in training for the work of teaching. In certain minor matters assistance will perhaps be rendered to the model teachers by students assigned to them for that purpose, and under the direction of the model teacher the students will be permitted to do such work as, in the teacher's judgment, can safely be intrusted to them. It is planned to show in this department, also, a model curriculum in arrangement of hours and in selection and arrangement of subject matter.

Improvements in many directions.—Thirteen replies announce new equipment in buildings, practice schools, dormitories, or other considerable addition to the physical plant. Two schools report new kindergarten features with Montessori principles; four describe additional preparation offered for prospective high-school teachers. Many announce steps taken into the field of training the so-called "special teachers"; 12 have added equipments and arranged special curriculums, not merely additional courses, for domestic science teaching, 16 for teaching of agriculture, 9 for drawing and manual training, 6 for music, 3 for special physical training, 4 for teaching commercial subjects, 3 for teaching the strictly industrial or the so-called "prevocational" work of upper grades, and 3 for teaching "normal training" work. Two institutions report successful courses for teachers in the problems of sex, and one reports a curriculum and facilities for preparing prospective teachers to deal with exceptional children. Several other institutions announce "courses" in this general field, though not "curriculums." This impressive total of institutions reporting some thoroughgoing progress in *curriculum-thinking and curriculum-making* is one of the most striking advances noted in the whole survey. One might properly add here courses for training in library work, graduate or research work, and correspondence courses, all decided extensions of the traditional programme.

There are eight accounts of fundamental changes in policy with reference to prescription and election of courses, and one other school reports the intention of "doing away with electives altogether." Several begin to doubt the pedagogical soundness of the present type of course in the history of education and in experimental psychology, and are introducing other fundamental courses of sociological, economic, and ethical character. Many speak in favor of the plan adopted in Minnesota and Wisconsin for normal schools to supplement other State institutions of higher learning by offering two years of college work. The experiment seems to be "working well and not interfering," according to reports.

Eight schools report the inauguration of extension teaching with the policy of establishing at strategic points what are termed "teaching centers." The following account of the work from the Macomb (Ill.) Normal School adequately presents the essential elements in this work, and is, moreover, descriptive of probably the most notable instance of extension teaching, although striking instances are numerous:

I consider extension work the greatest addition which we have made to our school work. Two years ago we made the experiment of sending one member of our faculty to one of our largest towns in this section, Quincy, to give regular normal school courses to the teachers in the public schools there. About 60 enrolled for this work, and carried two subjects, principles of teaching and psychology. The instructor met the class about 20 times during the year. The work was carefully supervised, and the results were extremely good. The interest was such that many of these teachers were led to enroll in the summer school and they have continued their work since; many have completed our normal school course. The results of this undertaking were entirely satisfactory, and last year arrangements were made to carry on the work on a very much larger scale. A regular member of our faculty was employed as extension director, to give all of his time to such work. Arrangements were made to have classes organized in 10 different centers within the district from which our school draws its support. Outlines were carefully prepared in psychology, principles of teaching, history of education, sociology, and geography. These outlines were placed in the hands of the teachers who enrolled for the work, textbook assignments were made, and supplementary readings were arranged. The main reference work was carried on through the secondary text which treated similar subjects to those treated in the primary text. Each one of the classes was met from 16 to 20 times during the year, beginning in September and closing the last of May or the first of June. At the end of the courses examinations were given. Those teachers who had done satisfactory work and passed satisfactory examinations were given full normal school credit for each course carried. No teacher was expected to carry more than two such courses; many of them but one. The school officials were enthusiastic about the work and have written many letters complimentary to the undertaking.

Another common phase of this extension work is what might be called rural social work. The four institutions reporting it employ some one to spend his entire time in rural institute activities.

Certain educational "novelties" in the way of curriculum offerings should be noted. In new curriculums, or in "short courses," are offered in some schools definite instruction in moral training, special personal hygiene for teachers, social hygiene, use of Montessori material, the various standardized tests for spelling, arithmetic, handwriting, and English composition, and instruction in dancing and in plays and games, as rowing, tennis, walking, and field games, and one attempt at "outdoor school work in a screened pergola." Educational museums are reported, and several attempts at demonstrations of reorganizations of the grades and of the methods and devices for promotion of pupils are described.

The following letter from the Indiana State Normal School shows the immediate response to important State legislation which normal schools make:

A law enacted by our general assembly of 1913, known as "The Vocational Education Law," requires the teaching hereafter of industrial and vocational subjects in all the grade and high schools of the State. The work will include vocational subjects, industrial education, domestic science and arts. The general assembly increased very materially the tax for the support of the Indiana State Normal School—the State's institution for the training of public-school teachers. This increased income will enable the institution to make early provision for training teachers for the new lines of work. We are already planning a large building to be used exclusively for the training of such teachers. Work will begin on this building within a few months, and it is hoped to push it to completion so that it may be ready for use early in the school year of 1914–15. There is at present in Indiana a very great demand for teachers of these subjects, and it is impossible to supply this demand. The changes which the new law will bring about in the school system of Indiana are the most important and far-reaching that the State has seen for many years. It will require several years for these new subjects to be well correlated with the old academic subjects and to reduce everything to smooth working order, but we are confident that, by careful study and experiment, the two kinds of work may be carried on together and be made to reinforce and strengthen each other.

There are some chafings at legal restraint. A normal school in Pennsylvania for example has not the freedom to make essential changes without the consent of the majority of the 12 other State normal schools.

A recent law in Vermont, by allowing recognition to training courses in high schools equal to that accorded to the two normal schools, apparently tends to lower the standard for teaching in that State. The Kansas Legislature recently repealed a law which provided that by 1917 no one not at least a graduate of the normal training course of an approved high school should be allowed to teach in any school of the State. These two laws mark about the only steps noted in this survey which seem to be retrogressive. In contrast with them is the following note of progress in Maine:

The legislature of the State of Maine at its biennial meeting, January, 1913, passed the following law: "No person shall be employed to teach in any school under the supervision and control of any school board of any city, town, or plantation of this city, after September 1, 1914, who does not hold a State certificate as herein provided. No person unless he is 17 years of age and has completed a standard high-school or academy course shall be eligible for a certificate."

No school law ever passed in the State of Maine was so drastic as this law; no law ever passed in any State will ever do more for the rural schools than this law will do for the rural schools of Maine. Children without education may no longer teach (?) school in Maine.

Indiana reports still higher standards. In Pennsylvania the school code of 1911 provided for the transfer under certain conditions of the property of the normal schools of the State from private ownership to public ownership and complete public control. From other States also come reports of similar change in administrative control, of the adoption of definite budget systems, and of methods of modern "scientific management" generally, not only in finance administration, but also in systems of scholarship records, and of machinery

for maintaining announced entrance standards, transfer of credits, and "straight" graduation.

On the whole the traditional normal school is tilling its own field, refining its courses, improving its equipment, raising its scholarship standard, and performing a genuine and enthusiastic service in training teachers for the elementary public schools.

Many other scattering features of this branch of teacher-training might be cited, but the movements described in the foregoing paragraphs are representative. It should be noted that there are instances, as the case cited from New York, of tendencies to extend the school term to cover the whole year. Four additional schools report the beginning of a regular summer session of six or eight weeks, and others are planning to do so.

The following paragraphs taken from a bulletin of the State Normal School at Spearfish well delimit the general field in which most of our institutions of this grade are working:

> The purpose of the State normal school is to train teachers for rural schools, village schools and principalships, city schools, the teaching of special subjects, the county superintendency, and for work in at least the smaller high schools.
>
> To do all of this it must be more than a high school, more than an industrial school, more than a commercial school, more than a training school. It must be all of these in one. It must offer the best instruction in all subjects taught in good schools. It must have admirable teachers and admirable equipment. It must do much and strong professional work, and the professional department must have as its laboratory a large and admirably conducted practice school.

Organization of subject matter.—The discussion of progress in normal schools has thus far been concerned primarily with administrative items; it seems fitting to close it with an account by Dr. Charles A. McMurry, of a pedagogical policy which, with modifications, might aid college teaching and high-school work, as well as elementary schools, for it is almost if not quite as much needed by them. Dr. McMurry thus describes the work which he is conducting at the Northern Illinois State Normal School:

> During the past two years in our training school we have been concentrating our effort upon the subject matter of school studies, with a view, first, to selecting the leading central topics in each study and to arranging these so as to get a far simpler and better organized course of study. Second, to carefully working out a full treatment of these important topics as examples of organization and method.
>
> We have been trying in this way to put into the hands of young teachers at the beginning of their practice work, in each case, an adequately worked out treatment of whatever topic is to be handled. The problem we have set ourselves is far more difficult than might at first appear. The difficulties to be met may be briefly indicated:
>
> First. Our present course of study is too bulky. It is an over accumulation of new and old materials, often not well-organized. We have too many things to teach and all too crowded to get anything well taught.
>
> Second. Our textbooks do not furnish full and adequate treatment of topics. In fact they lay no claim to such fullness of concrete detail and illustration as most topics require.

Third. In spite of a good high-school training and of a year's preliminary study in the normal school, students who are entering upon practice teaching are by no means masters of the special topics which they are expected to teach. We may summarize the main features of our plan in the following series of points:

1. We are putting this large collection of knowledge-materials in our present course through a sifting-out process. The result is the selection of a few main topics or units of study, which form the basis for reorganizing and simplifying the course of study.

2. We have set ourselves the task of working out an adequate treatment of these important topics, showing how much concrete, descriptive material—pictures, maps, etc.—is needed in each case to give the topic a completely satisfactory presentation. These full treatments we have reduced to typewritten or printed form, for whatever has been worked out effectively by one teacher may be later used by other teachers who have these topics to handle. * * *

3. We have therefore set our mature and best-trained teachers to work upon these large topics or units of study, to collect and organize this material and to bring it into satisfactory form for use in the classroom. * * *

4. When a young student is called upon to teach one of these topics, we put this complete and well-organized material into his hands with a carefully developed outline or sequence of main points, with a series of further references to library books and pamphlets, and with a few suggestions as to the method of treatment. * * *

5. Our thought is that young students will learn the principles of organization better by dealing with rich, well organized material which thoughtful experienced teachers have already molded into shape, than with miscellaneous reference materials which the young teacher has neither the time nor ability to bring into shape. As soon as he has acquired some notion of what is meant by organization, he may be called upon to do some of this planning and organizing himself.

6. Our young teachers find that they must expend the full measure of time, labor, and ingenuity at their disposal, in mastering these already prepared and organized materials, and in getting the whole subject into good shape for successful classroom treatment. * * *

7. The result of our plan, however, is much better actual teaching of the children. In such a plan as this the children are not much sacrificed to the experimentation of young and ill-prepared teachers. The just criticism against much of our practice teaching can be, to a considerable extent, silenced by this kind of careful forethought in preparation.

8. The planning of daily lessons is much simplified by such a scheme of working out large and important units of study. As a usual thing we do not try to plan each day's lesson as a unit. The entire topic, or unit of study, may require a half dozen or a dozen recitations to work it out completely. The teacher's planning directs itself to the entire unit of study. * * *

Before allowing a student to teach one of these large units of study we try to give him a test or examination on the topic to see how well-prepared he is before teaching it. Then after the student has taught the series of lessons to a class of children, we frequently give the children a test to see how well the work has been accomplished.

We are not trying to lay out a fixed and unchangeable plan and method for handling any particular topic. We hold ourselves free at all times to revise or change the treatment of any or all of our units of study. Every time a particular topic is taught the teacher is free to revise or improve it according to her judgment. Or it may be thrown aside if some better topic is found. In this way we hope to free ourselves from fixed formal and arbitrary routine. In classroom work, we feel that the teacher should remain free to operate according to her own convictions.

For analysis of the strictly professional instruction in education offered in a representative number of normal schools see Table IV.

VI. STATE DEPARTMENTS OF EDUCATION.

In requesting information from State superintendents of education, the following topics were mentioned to indicate the sort of information desired:

1. Extent to which the various colleges of the State that furnish teachers for the public schools are adopting higher standards, academic and professional, for intended teachers.
2. Specific advance steps noticeable in the grade of professional work done by the summer county institutes, and in the administration of these institutes.
3. Improvements in the reading circle as organized in your State; such, for example, as different departments for high-school and grade teachers.
4. Some reasons for believing that high schools (or county normal schools) are or are not successful in their efforts at teacher-training.
5. Means provided for making teachers' certificates based upon examination more nearly equivalent to certificates based upon academic and professional work done in the regular curriculums of normal schools or colleges.
6. Specific statutes adopted by your recent legislature providing for teacher-training in high schools.

Full replies were received from 20 State departments. In regard to question 1, practically all replies cite instances of raised standards of teaching. In Kansas the State board of education has recent legal authorization for standardizing teacher-training colleges; for over a year a committee from representatives of accredited colleges of the State has been at work preparing a manual of college standards. This document is expected to fix minimum standards of admission requirements, graduation requirements, training of professors, laboratory and library equipment, equipment of the department of education, etc., and maximum teaching hours per week for instructors. Any State college which can not measure well up to such a standard shall forfeit the right to certify to the State board its graduates as qualified to teach in secondary schools.

The reports from many of the small colleges indicate that they are conforming to the requirements of their respective States. This centralization of the standardizing function for teacher-training institutions of a State, though yet not very common, is in the end inevitable. It appears that 27 States now require some professional study of education with college graduation for certain teacher certificates. Others, without legal provision practice this method. The average number of college-credit hours in the professional study of education is now about 15 in addition to systematic observation and practice teaching, and there are many reports of increase in this requirement.

The number of States with no central system of teacher certification is less each year; Illinois adopted the central certificating plan in 1913, though with a low requirement. All this indicates the importance of establishing through the central agency of the State

department of education minimum standards for all grades of teaching. Until recently the larger cities, those of the first class particularly, have not been willing to subject themselves to some minor inconveniences that follow uniform State certification. There are evidences now that ideas of local autonomy will not continue to present this hindrance to the elevation of the standards of teaching as a profession.

Answers to question 2 indicate the importance which the State education departments place upon summer schools of all grades, from those at State universities to the county institutes. A lengthy discussion of the developments in this connection occurs in a later section of this survey.

In general, the information received relating to reading circles is significant. More and more that work is centralized under the direction of the State superintendent. Here also one finds greatest interest, and in most cases greatest faith, in the plan of State subsidy of high schools undertaking teacher-training functions.

Certificates upon examination.—It may be said that almost all State departments have the right to award certificates upon their own examinations in lieu of graduation after academic and professional study in a higher institution of higher grade. This is a necessary provision, but in its administration it has often resulted in lowered standards. Some of the replies evidence an appreciation of this fact and outline plans for more thoroughgoing tests.

Teacher training in high schools.—The answers to the questions indicate the further spread of the movement to make of high schools an important factor in teacher training. That movement is of great significance in the immediate development of secondary education. The normal training now administered not merely as additional courses in the general high-school program, but more and more as full, differentiated, thoroughly worked out curriculums for segregated groups of young candidates for teaching. Although there are some who are strenuously opposed to the movement, State superintendents and normal school presidents generally approve the policy, and look upon it as the only device now available by which we may hope to raise the present low standard of teaching in the rural schools.

There is cause for gratification when a State like Indiana can afford to add this professional work to a full four years' academic high-school work. In most States it is a question of practical import how far the laws can go in requiring academic preparation and professional training without making it impossible to man the country schools. Another bearing this whole matter has upon secondary education is the effect it is already having in adding momentum to the movement to extend the regular work of secondary schools to include two additional years.

GENERAL CONDITIONS IN CERTAIN STATES.

Wisconsin.—Most State superintendents are concerned with the larger policies with regard to what might be called the State's teaching assets. The following report from Wisconsin illustrates the attitude taken by most State superintendents, although that State is unique in some of the provisions described:

Standards of teaching.—In the State university there has been an effort to confine the teaching license to the subjects in which the teacher "majored." The teachers are not recommended for other lines of work than those in which they have majored, although sometimes practical necessity requires that they teach other things. It is required in late years that an intending teacher shall have had a course in the pedagogy of the subject she is majoring in. There is also a definite requirement of two-fifths of professional work. The other colleges of the State whose work is recognized in the granting of State certificates must come up to the standard of the State university.

The normal schools have been making slight advances in their requirements, but no notable advances.

Summer normal schools.—In place of the one and two week institutes formerly held in each county, we now require all persons who have never taught to attend a professional school for teachers and to obtain credits in four subjects: Methods in reading and language, methods in geography, methods in arithmetic, and methods in school management. A professional school for teachers is defined as a county training school for teachers, a State normal school, or a school of equivalent rank, offering courses similar to those offered in the State normal schools. By this law all teachers have had at least six weeks of professional training before commencing their work. In addition to the above requirements, county superintendents in all of the counties, by the aid of the State, hold two or more two-day institutes. In counties remote from the training schools and normal schools, superintendents have held one-week institutes.

Rural teachers.—The training and normal schools are doing more effective work, owing to the fact that men with more experience in rural conditions have been placed in charge of the professional work. There has been a tendency in the normal schools to offer instruction to the beginning teachers that was better fitted for grade work than for work in rural schools. The difficulty has been to engage instructors for the professional work in the professional schools who had the ability to teach and manage a one-room rural school.

Each professional school is maintaining an ungraded, model department that as far as possible embodies the conditions that will confront teachers in the one-room rural school. This model department is taught by an experienced country school-teacher, and beginning teachers are required to observe the methods of this teacher.

Greater attention is paid to the academic proficiency of the would-be teacher. Greater stress is put on the mastery of the subjects taught in the common schools by those who expect to teach.

There is not so marked a tendency on the part of the teachers in the classes in methods to neglect country school conditions and emphasize graded school work. The serious problem in methods is to adapt them to the needs of the persons who are to teach in rural schools. This tendency of instructors to keep in mind city conditions is rapidly disappearing.

Reading circles.—About two years ago a teachers' reading circle was organized, but the county was made the unit of effort rather than the State. A committee will report to the meeting of the State teachers' association next month on desirable changes in the organization and management of teachers' reading circles in the State. This committee will also report on the advisability of the formation of a State young people's

reading circle. The teachers' reading circle has not concerned itself much with the reading of other teachers than those in the rural schools.

Normal courses in high schools.—The legislature of the State, session of 1913, made provision for establishing 27 departments in 27 different high schools for the training of teachers, and for paying the cost of the instructor from State funds. Such training departments can not be established in counties which maintain a county training school for teachers, of which there are 27. The law does not specify how much aid may be given, but the State superintendent has practically decided that no school shall receive more than $1,000 of this aid per year, and in no case more than the salary of the teacher who administers the course.

School boards invariably give preference to persons that have completed the course of study offered at a county training school for teachers or at a high school maintaining a similar department.

There is no disposition on the part of the county boards of supervisors to abandon county training schools. In fact, these schools are firmly established as part of the educational policy of the State, and the legislature at its last session made provision for the establishment of four more schools.

State school inspectors invariably report that they are able to tell without previous knowledge whether or not a teacher in a rural school has had professional training at a high school or at a county training school. School boards are willing to pay a higher salary to teachers that have had this training. In late years the teachers writing for State certificates are expected to produce field and laboratory notebooks showing that they have done work in such subjects as biology and physics as given in the schools and colleges. This usually means the necessity of attending such institutions at least for a time.

Connecticut.—The puzzling response from Connecticut is an exception and leads to speculation as to what other thing a State department may do in this matter of influencing progress in teacher training.

None of the questions touch the conditions in this State.

At the risk of saying too much in response to your interrogatories I venture the following:

1. None of the colleges of the State furnish teachers for the public schools.
2. There are no summer county institutes. Usually we have a State teachers' meeting covering four to six weeks.
3. The reading circle is not organized by the State. There is a voluntary reading circle very limited in its scope.
4. High schools do not undertake teacher training.
5. No means have been provided for making teachers' certificates equivalent to any other certificates.
6. There are no statutes providing for teacher training in high schools.

The foregoing does not mean that we fail in training teachers or that our schools are without trained teachers.

We have no county organization. We have no State system of higher education.

Massachusetts.—A sort of high-grade service of a technical pedagogical character which a State department can, with great effectiveness and on a large scale, render the schools of an entire State is well typified in the work under the direction of Dr. David Snedden, State commissioner of education for Massachusetts. He distributes to both elementary and high-school workers valuable pamphlets of discriminating advice concerning the principles of curriculum making,

the principles of choice of courses of study, and the essential factors of method in distinguishing functions and fundamentals in different courses and in the organization of teaching material, both as to curriculum and daily schedule making. This service stands, among the activities of State superintendents, on a plane with the work of Dr. McMurray in normal schools, which was discussed at some length on a previous page.

Alaska.—The conditions in Alaska are exceptional and deserve full treatment, which is not practicable here. The following, however, will convey an idea of the state of affairs:

In Alaska there have been no recent changes in the administration of the white schools of the Territory, and there have been few advanced steps. The white schools in Alaska are maintained by direct appropriation for that purpose by Congress, the governor of the Territory being ex officio superintendent of schools. The Territorial legislature has no control over educational affairs in Alaska. That body, however, has memorialized Congress asking that steps be taken to secure a systematic inspection of the schools and the adoption of a uniform course of study in the schools of the Territory.

Alaska has no colleges; but in the graded schools, which are confined to the incorporated towns for the most part, higher standards, academic and professional, are being adopted for teachers employed in these schools. Teachers' institutes are unknown in the Territory, partly because the distances between towns are so great as to make them practically impossible; for the same reason, there are no reading clubs except, perhaps, in local high schools and among grade teachers.

The work done by most of the high schools of Alaska is without doubt thorough, for graduates are admitted to some of the State universities upon their certificates of graduation obtained from the high schools. It is also to be presumed that their efforts at teacher training are more or less successful. While the teachers in the schools of incorporated towns, I believe, are generally required to have certificates from normal schools or colleges before they are employed, in the white schools outside of the towns no examination for teachers' certificates is required. Teachers, however, must have certificates from some normal school or college, upon presentation of which a license to teach is issued by the ex officio superintendent of education for a period of two years.

No statutes were enacted by the recent Territorial legislature providing for teacher training in the high schools for the reason set forth, namely, that the legislature has no control over the Territorial schools.

IMPROVEMENT OF TEACHERS IN SERVICE.

Not even a partial account of recent progress in teacher training should fail to mention the various policies and plans in operation for the improvement of those teachers already in service. Some of these progressive steps may be mentioned briefly.

There are many instances of the provision for professional improvement of teachers through more systematic direction of their reading. Virginia, West Virginia, and other States wisely differentiate the requirements for reading for the different classes of teachers, elementary and secondary. Rochester furnishes a well-planned teachers' professional library and reading room, opened last September.

Of more professional interest, perhaps, are the steps taken by progressive cities in the provision for constructive classroom supervision which follows in a professional spirit some definite mutually understood standard of teaching. Illustrative of this is the recently published "supervision card" issued by the New York bureau of municipal research, a copy of the Ohio survey card, containing items for recording factors in classroom efficiency. Nothing perhaps so definitely marks genuine progress in training for teachers in service as the repeated indorsements and adoptions of such standards by school supervisors. The same may be said of definite graduated scales for the measurement of merit and for the promotion of teachers.

Beyond these signs of the general development of a teacher's professional conscience, significant administrative recognition is accorded teachers' attempts at self-improvement. Many more school boards than ever before are providing "visiting day" for teachers, a step toward other and better plans for teacher improvement. More cities are adopting the policy of paying teachers full salaries while attending teachers' meetings; others recognize summer-school attendance in their promotion policy; others make definite reimbursements for certain outlays for professional improvement; others encourage leaves of absence for travel or study and make provision for automatic reinstatement in position without the formality of reelection. The most advanced cities, Boston, Rochester, Cambridge, and others, make provisions for leaves of absence on salary for such purposes.

Another improvement of very great significance is the voluntary organization of teachers of the whole country on a high professional, but avowedly protective basis. The National Council of Education and the National Education Association in its most recent meeting have heard the elaborate plans for guild organization. Several State teacher organizations have made moves in the same direction.

VII. CITY SCHOOL SYSTEMS.

Much should be said in any adequate report of progress in teacher training concerning the constructive, extensive, and in a sense gratuitous or at least self-protective work of preparation of teachers done by city systems of education. Many far-seeing city superintendents are adopting Supt. Maxwell's fundamental idea that every school, elementary and high, as well as every city training school, shall contribute in its proper way to the training of teachers. With this conception of the work, many cities are adopting plans by which teachers in training may do practice teaching under the guidance of critic teachers and may observe gifted teachers at their work, while rendering substitute service. Notable among such cities are New York, St. Paul, Rochester, Spokane, Omaha, New Orleans, Paterson, N. J., Louisville, Ky., Kansas City, Mo., Birmingham, Ala., and

others. Almost every one of these cities presents some unique feature either of organization or of educational conviction of the pedagogical principles involved.

The following are extracts from letters sent in response to an inquiry:

Kansas City, Mo.—A normal training department has recently been established to prepare teachers for elementary schools. Two years following graduation from the high school are required, the first year in theoretical work, the second as cadet or substitute teacher.

During the past year no teachers have been employed who have not received professional training. We hope in the near future to advance the requirements both in theoretical and in practical work. This year we are placing our cadets under critic teachers at different places within the city. Two of these cadets are placed in charge of rooms having adjoining grades, and under the exclusive care of a critic teacher. They are required to do consecutive work in some specific grade, for at least 12 weeks, after which they are given an opportunity to do practice work in other grades. We feel that very efficient work is done in preparing our best high-school people for places in our elementary schools.

Louisville, Ky.—When the graduates of the normal school first become teachers in the public schools they are given the title "substitute teacher" and are paid $45 per month for a half year. At the end of that time, if their work has been satisfactory, they are made "temporary appointees" and receive $50 per month for half a year. At the end of this year, if their work continues to be satisfactory, they are recommended as permanent teachers in the Louisville public schools at a salary of $55 per month. Thereafter, advancement depends upon the growth of the teacher and the ability of the board to give special increases in salary.

The advantage of this plan is that the normal school graduates do not feel when they receive their diplomas that their preparation for the teaching profession is completed. Now they understand that they must continue to grow in order to receive permanent appointments in the Louisville schools. It is during this first year as teachers that they should be most ready to accept criticism and profit by it. The attitude of these people is quite different from that of the normal school graduate who believes she is going to receive a permanent position the very moment she has completed the two years' work in a city normal school, and that it is not necessary for her to continue to study and improve her technique.

This plan is also followed with the graduates of the Kentucky State normal schools and all persons employed to teach in the city schools. They must spend at least one year on probation before they are given permanent positions. This plan is not very different from the plan followed in other cities, the feature being that the teachers themselves realize that the first year must be a year of growth. After that the most efficient teachers are the ones who receive special increases from year to year.

Paterson, N. J.—Training of teachers for city schools requires a different course of professional study and a type of practice school different from those for training teachers for rural schools, because conditions and problems are essentially different. This applies not merely to special method work, special studies, etc., but to the more general studies—psychology, school administration, history of education, etc., in which, while the two classes of teachers may follow the same general direction, the incidence of attention and application will be different. It is an established fact that elementary school teachers and secondary school teachers can not be trained in the same courses; the difference is no greater than that between rural and urban teachers. Yet, in the average normal school, little distinction is made. The city training school is a specialized institution, doing advanced professional work.

The practice school is the laboratory of a normal school and should be thoroughly coordinated with it in administration. This is our aim. The starting point is in the

practice school for the study of psychology, management, class administration, educational sociology, special method courses, general method, and even, in a way, history of education. Young students take hold of these studies with better understanding of their inner meaning and value, if they approach them through the concrete. Not only this, but professional study should continue through the course, so that, when practice begins, the student will give part time to observation and practice and part to professional study, with the new light thrown on it by actual participation in school work. During the first stage of professional study, students visit different grades for observation and model lessons. Later they take up actual teaching under supervision for from one-half to two-thirds of each day and make a general study of school conditions, school administration, school methods, and school children, and a special study of particular problems of class administration, particular methods, and particular children. At the same time they continue their study of general professional subjects. This correlation between practice teaching and classroom study of great subjects strengthens and broadens each part of a professional course and helps the normal teacher to keep his class work in close touch with the everyday work of the schools and adapt it more fully to the practical needs of normal students. Too long have study and practice teaching been separated—thus tending toward the abstract. Our aim, very imperfectly realized at present, has, I believe, great promise in it.

New Orleans, La.—There is need that practice teaching should be conducted under conditions very similar to those prevailing in the regular schoolroom. A plan should be provided by which the critic teachers and supervisors of practice teaching in the normal school could follow up the graduates of the normal school during their first and second years of teaching. This follow-up plan is needed, since it frequently happens that the principal under whom the new teacher secures her first experience is not sympathetic toward normal-school training. This causes discouragement to the young teacher, and often results in her abandoning some of the very best methods taught in the normal school.

VIII. SUMMER SCHOOLS.

The development of summer schools of all grades has been unparalleled, and it seems to presage an era of all-the-year-round instruction in higher institutions. Whether or not this will be the outcome, it is certain that summer schools are undergoing radical changes in administration and methods, and are also fast becoming a substantial factor in the educational scheme of the country. The larger universities, like Columbia and Chicago and some State institutions, find it practically impossible to provide teaching facilities for the great number of teacher-students who apply. In increasing numbers the normal schools are abandoning the Chautauqua idea and conducting regular summer sessions for teachers. In the same way the large district and the smaller county institutes are becoming summer schools and assuming that name, offering in some cases differentiated courses of a strictly professional character for the teacher groups attending. As an instance of this extension of function of the summer county institute may be cited the "summer school" of Frederick County, Md., under the direction of J. M. Gambrill, "the result of the desire of the public school teachers for

real professional study." The purpose of the school for August 18 to September 5, 1913, was thus stated:

To displace the old-fashioned "inspirational" institute in which the whole body of teachers listen to lectures for several days, and to substitute in its stead real school, in which teachers are divided into groups according to the nature of their special problems, are supplied with books and material for serious study, and work cooperatively with their instructors for a sufficient time to accomplish tangible and practical results. A reference library will be available. The classes will be conducted so as to give opportunity for questions and discussions, and in each course the subject will be treated with special reference to the course of study and particular problems of the respective groups. Each instructor will have conference periods during which the student-teachers may consult him individually.

Sessions will be held in the mornings, five days in each week, from Monday to Friday. The afternoons will be left free for the reading assigned by the instructors and for the preparation of prescribed exercises. Work will in all cases begin promptly according to schedule, and attendance records will be kept by all instructors.

The plan of organization provides the following groups: (1) Primary: Beginners, chiefly for those of very little or no experience; (2) primary (rural): For teachers of one-room and two-room schools; (3) primary (urban): For teachers in graded schools with three or more teachers; (4) rural (grades 4–7): For teachers in one-room and two-room schools; (5) urban (grades 4–5); and (6) urban (grades 6–7): For teachers in graded schools with three or more teachers; (7) high school: For teachers of grades 8–11.

The extent to which normal schools do already, and will to a greater extent, figure in this summer work for teachers is suggested by the following report from the New York State department of education, at Albany:

The principal advancement which has been made in this State in the requirements for teachers' certificates has been in those set for teachers employed in the rural schools. The elementary certificate, the lowest grade issued for the rural schools, has been discontinued. It has also been announced that the academic certificate, one issued to a high-school graduate who has earned a regents' academic diploma, will not be issued after August 1, 1915, unless the holder of such diploma completes a summer course in a State normal school. The requirement for admission to training-course classes has been advanced so that no student who has not completed at least two years of high-school work may be admitted to one of these classes. The majority of the members of these classes now are high-school graduates. The summer session at the Oneonta State Normal School was continued and it is intended to open all State normal institutions for summer courses. A special rural school course was established in the Brockport State Normal School. The course requires instruction for one year, and the completion of four years' academic work is set for admission to such course. The number of training classes has been increased from 81 to 114, the maximum limit fixed in the law. These changes are important steps toward a requirement which shall demand that all rural school teachers shall have completed a four years' academic course and at least one year of professional training in a course especially adapted for rural schools. A reading course has been established for rural teachers through the cooperation of district superintendents.

The present requirement for all other elementary school teachers in this State is the completion of a four years' academic course and a two years' professional course in a State normal school or a city training school.

The general proportions of summer-school work in universities is indicated in the following tables and statistical comparisons:

Character of professional work in education offered in summer schools of certain colleges and universities, 1913.

Summer school of university of—	Methods.	History of education.	Educational psychology.	Elementary education.	Secondary education.	Principles of education.	Administration.	School and class management.	Abnormal psychology.	School hygiene.	Seminars.	Practice teaching.	Rural education.	Industrial education.	Supervision of instruction.	Educational problems.	Philosophy of education.	Experimental pedagogy.	School festivals.	Comparative school systems.	Vocational guidance.	Recreation and playgrounds.	School guidance.	Ethnology.	How to study.	Moral, religious, and social education.	Subjects for seminars.
California	....	....	2	....	[1]1	....	....	....	4	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Colorado	....	....	....	....	1	....	1	1	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	1	....	....	....
Cornell	....	1	1	1	....	1	1	....	....	1	....	....	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....
Dartmouth	....	1	....	....	....	....	1	2	....	....	1	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	Principles of education (graduates).
Denver	....	1	....	....	....	1	....	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Harvard	....	1	....	1	....	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....
Idaho	1	1	1	....	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Illinois	....	1	2	....	....	1	....	1	....	1	....	....	....	1	1	1	2	1	....	....	....	....	....	....	....	[1]1	....
Johns Hopkins	....	....	1	4	....	1	....	....	....	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	Medical university.
Kansas	....	1	1	....	1	1	1	....	....	....	1	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....
Kentucky	....	1	....	....	....	1	....	....	....	....	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....
Michigan	....	3	2	2	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....
Minnesota	....	1	....	....	....	....	1	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....
Missouri	3	1	1	1	1	1	1	....	1	....	2	1	1	1	....	....	1	....	....	....	....	....	....	....	....	....	1. Educational psychology (graduates); 2. School supervision (graduates).
Montana	1	1	2	4	....	....	1	....	1	1	....	....	2	....	....	....	....	....	....	....	....	....	....	....	1	....	....
New Mexico	1	1	1	....	....	1	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
New York	5	2	....	3	1	1	....	3	5	....	2	1	....	....	....	....	....	2	....	1	....	....	....	....	....	....	Abnormal psychology (advanced students).
North Carolina	3	....	1	....	2	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
North Dakota	....	1	....	....	1	....	....	....	....	....	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....
Ohio	....	2	1	....	1	....	1	....	....	....	1	....	....	....	....	....	1	....	....	....	....	....	....	....	....	....	School administration (graduates).
Oklahoma	3	1	2	....	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Pennsylvania	8	1	....	4	....	1	1	....	....	1	1	....	....	2	....	....	....	1	....	....	....	....	1	....	....	....	Elementary education.
Tennessee	....	2	3	....	1	....	2	1	....	2	....	1	1	....	....	1	....	....	....	....	....	....	....	....	....	[2]1	....
Utah	1	1	3	....	1	2	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Vermont	2	1	1	1	....	1	1	....	....	....	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Modern problems.
Virginia	2	2	1	5	1	....	1	2	....	....	....	1	1	....	....	....	....	....	....	....	....	1	....	....	....	....	....
Washington	1	1	1	....	1	1	1	....	1	1	1	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	Research (graduates).
Wisconsin	....	2	2	....	....	....	....	....	....	1	....	....	....	....	1	....	....	....	2	....	....	....	....	....	....	....	[1]1	....
Wyoming	2	1	1	2	4	1	....	1	....	....	....	2	....	....	2	1	....	....	....	....	....	....	....	....	....	....	[3]1	....
Total (282)	33	32	30	28	20	18	16	14	12	11	10	9	8	6	6	5	5	5	3	2	1	1	1	1	1	4	....

[1] Social education.

[2] Moral and religious education.

[3] Moral and social education.

Courses of instruction and number and professional training of instructors in education in certain summer schools.

Summer schools in 1913.	Number of courses.	Number of instructors.	Instructors with—				
			Ph. D.	A. M.	A. B.	Other degrees.	No degree.
University of California	7	[1] 6	3	.....	1	.....	1
University of Colorado	6	5	1	.....	2	1 LL. D. 1 Litt. D.	.....
Cornell University	8	5	2	1	2	.....	.....
Dartmouth College	[2] 6	4	1	.....	.....	1 LL. D. 1 Pd. M. 1 B. S.	.....
University of Denver	4	2	1	1	.....	.....	.....
Harvard University	5	3	1	1	1	.....	.....
University of Idaho	6	5	.....	2	[3] 1	1 M. S.	1
University of Illinois	[3] 13	6	4	1	.....	.....	1
Johns Hopkins University	[4] 9	6	2	1	1	1 S. B.	1
University of Kansas	[5] 8	3	1	2	.....	.....	.....
University of Kentucky	4	2	.....	2	.....	.....	.....
University of Michigan	11	4	4	.....	.....	.....	.....
University of Minnesota	4	2	1	.....	1	.....	.....
University of Missouri	16	9	6	2	.....	1 B. S.	.....
University of Montana	14	8	1	1	.....	.....	[6] 6
University of New Mexico	5	(7)	.....	.....	.....	.....	.....
New York University	[8] 26	12	8	1	.....	1 B. S. 1 Ph. B.	1
University of North Carolina	7	4	1	.....	1	.....	2
University of North Dakota	3	1	1	.....	.....	.....	.....
Ohio University	[9] 7	3	1	2	.....	.....	.....
University of Oklahoma	8	5	2	1	1	1 B. S.	.....
University of Pennsylvania	21	[10] 18	2	1	.....	.....	.....
University of Tennessee	[11] 15	11	3	3	3	1 B. S. 1 M. E.	.....
University of Utah	8	3	1	.....	.....	1 D. Dd.	[12] 1
University of Vermont	[13] 8	4	1	1	1	.....	1
University of Virginia	17	14	1	3	.....	1 M. Pd. 2 B. S.	[14] 6
University of Washington	9	5	3	.....	2	.....	.....
University of Wisconsin	9	6	2	2	.....	1 M. L. 1 L. L.	.....
University of Wyoming	18	5	1	3	.....	.....	1
Total	282	161	55	31	17	19	24

[1] Instructors' names not stated in faculty list.
[2] Six allied courses. Round tables (supervision) one course for graduate work.
[3] Six open for graduate credit; three by vote of graduate faculty.
[4] Demonstration school of seven elementary grades.
[5] Seven given graduate credit; in educational psychology and secondary education, extra work gives extra credits; 30 hours' graduate credit can be secured during consecutive summer session residence.
[6] No degree given.
[7] Faculty list not given.
[8] Special model school of 100 defective children; work in this school may count toward Pd. D. degree; students in certain courses are exempted from some of the examinations for New York City teachers.
[9] Three or four of the courses offered give graduate credit if desired.
[10] Ten professors—9 in school of observation; 8 lecturers; just 3 degrees given.
[11] School hygiene courses taught by men from engineering department; special methods in general subjects.
[12] Professor's name not given in faculty list.
[13] Allied courses in elocution; 3-year summer normal course.
[14] For requirements of teachers of higher grades, see pages 16–21 of summer catalogue; teaching Montessori method—name not on faculty list.

Summer session enrollments at seven of the universities in the Middle West, 1907–1911.

UNIVERSITY OF CHICAGO.

	1907	1908	1909	1910	1911
Liberal arts and science:					
Men	929	1,120	1,161	1,181	1,261
Women	815	881	947	948	888
Total	1,744	2,001	2,108	2,129	2,149
Professional:					
Divinity—					
Men	198	211	240	226	193
Women	23	9	27	21	29
Medicine—					
Men	93	132	135	131	85
Women	9	16	8	12	9
Law—					
Men	122	120	143	139	157
Women	1	1	1	2	1
Education:					
Men	79	108	125	149	123
Women	423	587	606	636	616
Total	958	1,184	1,285	1,316	1,213
Total registered	2,702	3,185	3,393	3,445	3,362
Duplicates	89	134	129	109	110
Net total	2,613	3,051	3,264	3,336	2,252

UNIVERSITY OF ILLINOIS.

Men	333	477	456	463	417
Women	222	187	175	214	230
Total	555	664	631	677	647

UNIVERSITY OF INDIANA.

Total	721	1,005	1,139	1,337	1,069

UNIVERSITY OF MICHIGAN.

Literature, science, and arts	500	558	678	694	645
Department of engineering	335	321	316	340	284
Medicine and surgery	99	80	108	104	121
Law	121	119	149	131	153
Homeopathic	3	7	1	.....	.....
Dental surgery	12	.....	.....	.....	.....
Pharmacy	.....	.....	.....	11	15
Total	1,070	1,085	1,224	1,237	1,194

UNIVERSITY OF MISSOURI.

Columbia:					
Men	222	255	294	286	.....
Women	230	253	258	290	.....
Rollo School of Mines:					
Men	.....	.....	24	20	.....
Women	.....	.....	.....	1	.....
Total	452	508	576	597	597

Summer session enrollments at seven of the universities in the Middle West, 1907–1911—Continued.

OHIO STATE UNIVERSITY, COLUMBUS.

	1907	1908	1909	1910	1911
Summer term	308	453	592	639	738
Lake laboratory	26	32	36	22	28
Civil engineering	11	18	14	.....	.....
Shopwork	80	.....	.....	.....	.....
Total	425	503	642	661	766

UNIVERSITY OF WISCONSIN.

Literature and science:					
Graduates	167	267	313	367	.....
Undergraduates and teachers	368	470	550	627	.....
Law	37	51	67	47	.....
Engineering:					
Graduates	3	18	15	13	.....
Undergraduates and artisans	73	209	174	138	.....
Agriculture:					
Graduates	.....	.....	.....	14	.....
Undergraduates	.....	.....	.....	51	.....
Dairy school	13	11	9	6	.....
Total	661	1,026	1,128	1,263	1,537

Summer session, 1912.

Institutions.	Courses.				Instructors.					
	Undergraduate.	Graduate and undergraduate.	Graduate.	Total.	Professors.	Associate professors.	Assistant professors.	Others.	Total.	Proportion of professorial rank.
										Per cent.
Chicago	203	132	98	333	66	35	29	109	239	54
Illinois	94	12	16	122	13	1	9	42	65	35
Indiana	144	6	5	155	24	14	8	48	94	49
Michigan	226	21	44	291	50	.....	37	78	165	53
Missouri	59	56	10	125	15	.....	10	20	45	56
Ohio	87	17	14	118	27	6	13	17	63	73
Wisconsin	154	77	16	249	19	21	28	66	134	51

Class registration of graduate students in summer school of University of Illinois.

(Emphasizing the increasing general demand for graduate instruction in education.)

	1910	1911	1912	1913
Accountancy	0	0	0	0
Agriculture	0	2	1	10
Art and design	0	0	0	0
Biology	1	.....	.....	.....
Botany	6	7	2	10
Chemistry	6	18	5	19
Drawing, general engineering	0	0	0	0
Economics	0	2	3	1
Education	**22**	**23**	**37**	**98**
English	6	5	11	18
Entomology	1	0	0	8
French	5	2	2	3
German	7	8	1	5
History	77	11	9	8
Household science	1	0	.....	3
Latin	0	0	1	8
Manual training	4	0	0	2
Mathematics	10	9	2	6
Mechanical engineering	3	0	0	0
Mechanics, theoretical and applied	0	1	0	2
Philosophy	0	1	.....	.....
Physical training:				
Women	4	0	0	.....
Men	0	0	0	0
Physics	5	4	4	3
Physiography	2	1	1	.....
Political science	1	0	7	0
Sociology	3	4	5	0
Spanish	0	0	.....	.....
Zoology	17	1	2	2
Music	0	1	0	0

CHAPTER XXV.

EDUCATIONAL BOARDS, FOUNDATIONS, AND ASSOCIATIONS.

By Henry R. Evans,
Editorial Division, Bureau of Education.

Contents.—I. Educational boards and foundations: General Education Board; Carnegie Foundation John F. Slater Fund; Southern Education Board; the Phelps-Stokes Fund.—II. Educational associations: National Education Association; American Institute of Instruction; Conference for Education in the South; Southern Educational Association; Catholic Educational Association; National Society for the Promotion of Industrial Education; National Vocational Guidance Association; American School Hygiene Association; National Association of State Universities; National Conference Committee on Standards of Colleges and Secondary Schools; North Central Association of Colleges and Secondary Schools; Association of Colleges and Preparatory Schools of the Middle States and Maryland; New England Association of Colleges and Preparatory Schools; Secondary Schools in Relations with the University of Chicago; Western Drawing and Manual Training Association; Music Teachers National Association; American Physical Education Association; Association of American Law Schools; American Federation of Arts; National Association of Teachers in Colored Schools; American Peace Congress; Lake Mohonk Conference.

This chapter is a brief résumé of the current activities of certain of the educational boards, foundations, associations, etc., which are a prominent feature of present-day educational progress in the United States. The number of these agencies has so multiplied that it is impossible to give a comprehensive report of all that are doing valuable work; and the chief purpose of the following pages is to summarize particularly the work of such of these organizations as may not be specifically treated elsewhere in this report. For obvious reasons the work of one or two organizations not strictly educational is also reviewed, whenever this work affects current educational thought or is closely allied with education. For a list of educational associations, State, national, and international, with the names of their officers, see the Educational Directory issued by the Bureau of Education (Bulletin, 1913, No. 46).

I. EDUCATIONAL BOARDS AND FOUNDATIONS.

GENERAL EDUCATION BOARD.

The functions of the General Education Board comprise: (1) The promotion of practical farming in the Southern States; (2) the development of a system of public high schools in the Southern States; and

(3) the promotion of higher education throughout the United States. Independent educational work is not the object of the board, but rather the securing of results through established institutions and agencies. The following is a summary of the financial report for the fiscal year ended June 30, 1913, submitted to the Secretary of the Interior by the treasurer, Mr. L. G. Myers, of New York City:

(1) *The Rockefeller fund.*—Principal account, $30,918,063.80; reserve, $1,867,336.03; total, $32,785,399.83. Income account: Balance on hand July 1, 1912, $4,903,802.83; income for year, $2,257,583.70; total available, $7,161,386.53.

(2) *John D. Rockefeller special fund* (subject to order of Mr. Rockefeller).—Income account: Balance July 1, 1912, $961,625.63; income for year, $423,168.79; total, $1,384,794.42. Expenses, $1,347.02; gift to the Rockefeller Institute for Medical Research, $615,294.77; gift to University of Chicago, $20,000. Balance: Investments, $604,660.19; income receivable, $77,985.66; cash on deposit, $65,506.78; total, $748,152.63. Principal account: Original gift, $21,335,784.20; balance of original gift, $893,111.10.

CARNEGIE FOUNDATION FOR THE ADVANCEMENT OF TEACHING.

The seventh annual report of the Carnegie Foundation for the fiscal year ending September 30, 1912, comprises two parts: Part I, relating to the current business of the year; Part II, discussing current educational problems of interest.

The endowment of the foundation during the fiscal year has been increased by $2,000,000. Mr. Carnegie transferred $1,000,000 to the trustees in December, 1911, and in May, 1912, he transferred a similar sum. The trustees hold in trust at present about $14,000,000. During the fiscal year, the trustees were in receipt of an income aggregating $676,486.56. They authorized a total expenditure of $634,496.89. Forty-eight retiring allowances were granted during the year, of which 32 were in accepted institutions and 2 in institutions not on the accepted list. During the year 20 pensioners died. Of those admitted to the benefits of the foundation, 32 were professors and 11 were widows of professors in accepted institutions; 2 were professors and 3 widows of professors in institutions not accepted. Thirty-one of the number were retired on the basis of age and 3 on the basis of permanent disability. The general average of retiring allowances for the year was $2,000. The total number of allowances in force (September 30, 1912) was 398, and the total grant in force at that date was $603,855. The expenses of administration of the foundation were $36,949.31; educational investigation and publication, $27,124.55. The executive committee added no institutions to the accepted list during the year, resolving—

that all applications of institutions to be placed upon this list should await the receipt of a report concerning the present and prospective financial obligations of the foundation, based upon the actuarial study now in progress.

In his report the president, Dr. Pritchett, treats the whole question of pensions for teachers, for Government employees, and for industrial employees, and finally discusses a feasible pension system for the public-school teachers of a State. In the second part of the report the following topics are treated: College entrance requirements; admission to advanced standing; medical progress; university and college financial reporting; advertising as a factor in education; education and politics; sham universities. The foundation published during the fiscal year Dr. Abraham Flexner's elaborate study of medical education in England, Germany, and France, which forms a necessary supplement to the study of medical education in the United States and Canada brought out two years ago.

In January, 1913, Mr. Andrew Carnegie gave $1,250,000 to the foundation, in the form of 5 per cent bonds, to be devoted exclusively to the endowment of a division of educational inquiry. In his letter to the trustees, announcing the benefaction, he says:

> It shall be the function of the division of educational inquiry to conduct studies and to make investigations concerning universities, colleges, professional schools, and systems of education generally, to investigate problems of education affecting the improvement of educational methods, the advancement of teaching, or betterment of educational standards, and in general to investigate and to report upon those educational agencies which undertake to deal with the intellectual, social, and moral progress of mankind and to publish such results as the trustees may consider of value.

JOHN F. SLATER FUND.

The annual meeting of the trustees of the John F. Slater Fund was held in New York City, April 23, 1913. Director James H. Dillard, in his report of the work of the fund for the current year, presented a statement showing the amounts appropriated during the past 30 years to various institutions. It was recommended and adopted that the sum of $69,250 be appropriated for the fiscal year 1913–14. The director was authorized "to use interchangeably the appropriations for next year for county training schools, summer schools, and extension work." The new plan of the county teacher-training schools for negroes, to be established under the auspices of the Slater Fund, has attracted the attention of county superintendents in the South. Seven of these schools have thus far been instituted. The only two conditions on which the Slater board makes appropriations for such schools is that the property shall belong to the county, in other words that they shall be regular public schools; and secondly that the county shall guarantee a fair support. While not dictating how the Slater appropriation shall be spent, it is usually understood that it goes for the promotion of industrial training, so that teachers trained in these schools may be prepared to teach industrial occupations in the small country schools in which they may work.

SOUTHERN EDUCATION BOARD.

During the current year the funds of the Southern Education Board have been appropriated to State boards and State departments of education, to be used largely in paying the salaries and expenses of State supervisors of rural schools and State organizers of school improvement work. Contributions have been made to Alabama, Arkansas, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. In addition, appropriations have been made to Alabama, Arkansas, and North Carolina, for aiding in educational campaigns.

The Peabody Education Fund has appropriated funds to Alabama, Arkansas, Louisiana, North Carolina, South Carolina, and Virginia for similar purposes. The general administration of both funds has been centered in one office, located in Washington, D. C.

The State supervisors of rural schools are appointed by the State superintendents, and, when necessary, confirmed by the State boards of education, so that they are members of the State superintendents' cabinets, with all the powers and responsibilities belonging to such positions. Their work is done under the general supervision of the State departments of education, and their entire time is devoted to the building up of the rural schools in the States. It is owing largely to the earnest efforts of the State supervisors that tendencies in the public-school system of the Southern States are now integrating, instead of disintegrating, as they were for many years. The people are bringing the little schools together, making at least the beginnings of centers for rural culture.

The State supervisors report monthly to the departments of education, and copies of these reports are sent to the office of the Southern Education Board in Washington. Summaries of these reports are then prepared and manifolded, copies of which are mailed to the workers in each State. In this manner any significant development in one State is reported at once to all the other States. The office is a center for collecting and distributing information from every possible source bearing directly upon rural school progress.

The State supervisors have a permanent organization and they meet annually in connection with the Conference for Education in the South.

THE PHELPS-STOKES FUND.

The Phelps-Stokes Fund is the residuary estate, amounting to about $1,000,000, bequeathed by Miss Caroline Phelps Stokes, of New York City, for various philanthropic purposes, among which is the education of negroes. Most of the appropriations made up to date have contributed directly or indirectly to a clearer knowledge of colored schools. With the cooperation of the Phelps-Stokes Fund,

the Bureau of Education is now making a comprehensive study of the private and higher schools for colored people. This study is undertaken in response to numerous and insistent demands for knowledge of these schools, the number of which is constantly increasing. When sufficient data have been collected a report will be printed and published giving a brief, but accurate, survey of each school, of its equipment, its work, and its place in the educational system of the city, county, or State in which it is located.

II. EDUCATIONAL ASSOCIATIONS.

NATIONAL EDUCATION ASSOCIATION.

The fifty-first annual meeting of the National Education Association of the United States was held in Salt Lake City, Utah, July 5–12, 1913. In his presidential address Dr. Edward T. Fairchild discussed the future of the association. He recommended the creation of an advisory council, consisting of three persons, two of whom selected by the directors or by the trustees, should serve for a term of years. The third member should be the president of the association ex officio. "The appointed members should be eminent, constructive educators, endowed with the true spirit of research. The salary should be commensurate with the importance and responsibility of the work, and such as would enable them to give their entire time to the duties committed to their care." A number of interesting papers were read, among them "The schoolhouse evening center—what it is, what it costs, and what it pays," by Lee F. Hanmer; "The new rural school," by Neil C. Macdonald; and "The teaching of civics in elementary and secondary schools," by J. Lynn Barnard. Dr. Thomas Jesse Jones, of the United States Bureau of Education, presented a paper on the "High school and democracy." Dr. P. P. Claxton, United States Commissioner of Education, delivered an address on the work of the Bureau of Education.

The various departments of the association held interesting meetings for the discussion of the many educational activities assigned to them, as follows: Kindergarten education, elementary education, secondary education, higher education, normal schools, manual training and art education, music, business education, child hygiene, physical education, science instruction, school administration, library economy, special education, school patrons, rural and agricultural education.

DEPARTMENT OF SUPERINTENDENCE.

The Department of Superintendence met in Philadelphia, Pa., February 26–28, 1913, President Franklin B. Dyer, superintendent of schools, Boston, Mass., presiding. Many important papers were read

and reports of committees submitted. The report of the committee on economy of time in elementary education was presented in several sections: (*A*) Report on progress by the committee on economy of time in elementary and secondary education, by H. B. Wilson; (*B*) A seven-year elementary school, by Charles H. Judd; (*C*) Mobility of the teaching population in relation to economy of time, by Lotus D. Coffman; (*D*) The economy of time through testing the course of study and time allotment, by Leonard P. Ayres.

One of the most valuable reports was that of the joint committee on grammatical nomenclature, since completed and published. The purpose of the system of nomenclature recommended by the committee is to clear the way for the intelligent study of the field with which it deals—the relations of thought as seen in language.

The topic "Improving school systems by scientific management" was discussed by Supt. F. E. Spaulding and Profs. Paul H. Hanus and A. Duncan Yocum. Supt. Spaulding presented a number of graphic statistical charts showing results obtained in the schools of Newton, Mass.

Resolutions were passed indorsing differentiation in courses of study in the last two years of grammar-school work; advocating wider use of the school plant for educational, social, and civic purposes; and the development and encouragement of industrial and vocational education.

NATIONAL COUNCIL OF EDUCATION.

The National Council met in Philadelphia, Pa., February 24–28, 1913. The topic for consideration at the opening session was "The reorganization of the teaching profession." The general presentation of the subject was made by Prof. Henry Suzzalo. Dr. Thomas D. Wood, chairman of the joint committee on health problems in education, presented a report on "The sanitation of rural schools," in which he declared that the majority of the rural schoolhouses are unfit for use because of insanitary conditions.

The report of the committee on tests and standards of efficiency in schools and school systems was made by Prof. George D. Strayer, chairman. He urged the importance of appointing a committee or commission on school efficiency whose functions should be to offer encouragement, expert advice, and opportunity for publication to those engaged in scientific work in the direction of the derivation of scales of measurements.[1]

A resolution was adopted approving the above recommendations, and a committee of 15 members was appointed.

[1] See Bureau of Education bulletin, 1913, No. 13.

REPORT OF SECRETARY OF THE NATIONAL EDUCATION ASSOCIATION.

ANN ARBOR, MICH., *August 30, 1913.*

SIR: Complying with the provisions of section 4 of the act of incorporation of the National Education Association by Congress, approved June 30, 1906, the following is submitted as an annual report:

An office is maintained in the city of Washington at 662 E Street NE., in accordance with section 8 of the act of incorporation, but the association owns no property, real or personal, in the city of Washington.

The personal property of the association is largely in the form of volumes of proceedings, pamphlets, reprints, and office furniture, worth about $12,000, all of which is in the custody of the secretary, in Ann Arbor, Mich., where the business of the association is transacted.

The association has a permanent invested fund, referred to in section 7 of the act of incorporation, which is in charge of the board of trustees. This fund at the close of the fiscal year, June 30, 1913, amounted to $188,000. The net revenue from this fund amounted to $6,932.63, which was transferred to the treasury of the association for current expenses.

During the fiscal year ended July 1, 1913, the total receipts from all sources, including balance at the beginning, were $50,277.26; the total expenses were $47,984.76; the balance in the treasury June 30, 1913, was $2,292.50.

The chief sources of revenue are membership fees, proceeds of sale of volumes and reports, and income from the invested fund.

The chief items of expense are the printing and distribution of the annual volumes, the maintenance of the secretary's office, and the expense of preparing for and conducting the annual convention.

The usual appropriations for educational investigations were made at the time of the convention, which was held in Salt Lake City, Utah, July 5–12, 1913.

The general sessions and the sessions of the departments were well attended, and the programs presented were of the usual standard of excellence.

The following general officers were elected for the ensuing year: President, Joseph Swain, of Swarthmore, Pa.; vice president, Edward T. Fairchild, of Durham, N. H.; treasurer, Grace M. Shepherd, of Boise, Idaho.

The executive committee for the ensuing year will be constituted as follows: President, Joseph Swain, president of Swarthmore College, Swarthmore, Pa.; first vice president, Edward T. Fairchild, president of New Hampshire College, Durham, N. H.; treasurer, Grace M. Shepherd, State superintendent of public instruction, Boise, Idaho;

chairman of trustees, J. Stanley Brown, principal of Township High School, Joliet, Ill.; member by election, George B. Cook, State superintendent of public instruction, Little Rock, Ark.

The board of trustees for the ensuing year will be as follows: Chairman, J. Stanley Brown, principal of Township High School, Joliet, Ill.; secretary, James Y. Joyner, State superintendent of public instruction, Raleigh, N. C.; Robert J. Aley, president of University of Maine, Orono, Me.; James M. Greenwood, Kansas City, Mo.; Joseph Swain, president of Swarthmore College, Swarthmore, Pa.

The final report of the committee on geometry syllabus was published during the year as a 54-page pamphlet. The committee on uniform records and reports presented its final report, and it was printed as a 52-page pamphlet. A 10,000 edition of the first report of the committee on teachers' salaries and cost of living, 328 pages, was printed in February.

I am, respectfully, yours, D. W. SPRINGER,
Secretary.

Hon. P. P. CLAXTON,
Commissioner of Education of the United States,
Washington, D. C.

AMERICAN INSTITUTE OF INSTRUCTION.

Making no pretense of rivaling other organizations in attendance and other external features, the American Institute of Instruction exerts an influence on educational thought not surpassed by any other educational organization. The eighty-second annual meeting, held at Bethlehem, N. H., July 1–4, 1913, touched in a vital way most of the important phases of education. Dr. David Snedden, commissioner of education for Massachusetts, delivered a careful statement on increasing the efficiency of education.

Other addresses were: "Professional cooperation," by State Superintendent Henry C. Morrison, of New Hampshire; "Mechanical drill as a means to intellectual freedom," by Prof. A. Duncan Yocum, of the University of Pennsylvania; "The duty of the school to arouse a sense of responsibility in the home," by Supt. Franklin B. Dyer, of Boston.

CONFERENCE FOR EDUCATION IN THE SOUTH.

The sixteenth Conference for Education in the South, held at Richmond, Va., April 15–18, 1913, was memorable for its emphasis on the principle of cooperation. Farmers, business men, and educators met separately and together to discuss methods of community betterment. The farmers' conference discussed organized cooperative buying and selling and cooperative local credit associations; the

business men's conference discussed the farm situation in the South, the marketing of cotton, the social needs of farm life, the assistance of commercial bodies or towns in efforts for farm development. The women's conference discussed the education of women in the country. There was also a conference on the country church and a conference on taxation. In the evening meetings there were addresses by Henry Exall, of Dallas, Tex., on "Man and the land"; by L. E. Johnson, president of the Norfolk & Western Railway, on "The rural problem from the standpoint of a railroad president"; while Charles Lee Raper, of the University of North Carolina, discussed "Taxation: The effectiveness and justice of government in the Southern States." One evening was given to farm-demonstration work in the South. The final evening was devoted to three main topics: Rural-school work in the South, high-school work in the South, and health work in the South.

In summarizing the work of the conference, Ambassador Walter Hines Page, who presided over the sessions, declared:

> The historian of the progress of democracy could not write a more thrilling chapter than the events of the past 10 or 15 years, taking as the cue the note of the Conference for Education in the South. We began with the school and the child and we end with them, of course; but every step has been toward a widening democratic ideal, to see how we could teach one another, and we have come to have a broadening sense of all that cooperation means.

Robert C. Ogden, president of the conference, and for many years a noted leader in educational work in the South, died in New York City August 7, 1913.

SOUTHERN EDUCATIONAL ASSOCIATION.

The twenty-third annual meeting of the Southern Educational Association was held at Louisville, Ky., November 28–30, 1912. Dr. H. L. Whitfield presented a discussion of the high-school situation of the South. W. E. Halbrook read a paper on "Training for cooperative and systematic activities in the rural schools." The third session was devoted largely to discussions of rural education. Dr. Charles C. Thach delivered an address on "Training for life work in our rural schools." Dr. Claxton, United States Commissioner of Education, declared that the fundamental problem of education in the South was the democracy of occupations. "If vocations are equally honored because they equally serve the community, we will have the right principle of education." The final session of the association was devoted to a paper by Hon. M. P. Shawkey on the "Public school and efficiency."

Resolutions were adopted urging the right kind of education for the southern negro, so "that he may not be a menace to society;" the better education of the farmer's child by relating his school to

his environment; the education of girls in practical studies; and the payment of equal salaries to men and women teachers for equal service.

CATHOLIC EDUCATIONAL ASSOCIATION.

The tenth annual meeting of the Catholic Educational Association was held in New Orleans, La., June 30–July 3, 1913. The secretary-general in his report to the executive board, discussing the work of the association, laid stress on the fact that the problem of the curriculum is the focal point of interest.

A resolution was adopted at the meeting protesting against and condemning as—

subversive of true morality, the imparting of sexual knowledge to children as at present carried on in many private and public schools in the country.

Notable addresses were made by Rt. Rev. Monsignor T. J. Shahan, of the Catholic University of America, on "The teaching office of the Catholic church;" Rev. Francis W. Howard, on "The problem of the curriculum;" and Rev. Albert Muntoch, S. J., on "Vocational guidance." In dealing with the problem of the curriculum, Rev. F. W. Howard declared that Catholic educators were confronted with several different lines of action, which he enumerated as follows:

1. Shall we conform to the secular system in subjects, textbooks, arrangement of courses, grading, and adjustment of the various departments of the system, with the addition of religious instruction, and Catholic philosophy?
2. Shall we endeavor to arrange our work in entire independence of the State system?
3. Shall we endeavor to make a systematic study of present conditions, inquire into the causes of present confusion, and endeavor to formulate the principles of some sound system of Christian education, that will be in substantial accord with the reasonable features of the secular education of the day, and at the same time insure us a moderate and reasonable measure of independence?

By adopting the first, we face gradual extinction; the second is impossible for us, and the most prudent thing for us to do is to adopt the third plan outlined.

NATIONAL VOCATIONAL GUIDANCE ASSOCIATION.

The organization meeting of the National Vocational Guidance Association was held at Grand Rapids, Mich., October 21–23. This was the third national conference on vocational guidance, previous meetings having been held at Boston in 1910 and at New York City in 1912. In a session devoted to "the larger social, economic, and educational bearings of vocational guidance," Owen Lovejoy discussed "vocational guidance and child labor." He urged that the child's future usefulness, not the present balance sheet should be the measure of the success of guidance into vocations. In showing results of recent studies of the Russell Sage Foundation, Leonard P. Ayres stressed the need for a fact basis for work in vocational guidance; the need for careful study of vocations to determine constancy

and other factors in employment. Prof. George H. Mead, of the University of Chicago, analyzed critically current educational conditions. Meyer Bloomfield, director of the Vocation Bureau of Boston, described some of the lessons Europe has for the United States; Prof. Frederick G. Bonser, of Teachers College, Columbia University, urged the necessity of professional training for vocational counseling; and Helen T. Woolley, of Cincinnati, traced the history of the vocational guidance movement. One session was devoted to vocational guidance within the public school system. Alfred P. Fletcher, of Rochester, N. Y., attempted to answer four questions: (1) Is vocational guidance needed, and if so, what kind? (2) How can that vocational guidance be given? (3) Can it be given by means of differentiated courses of study? (4) How should such courses be organized? F. M. Giles, of DeKalb, Ill., described his attempt to introduce guidance in a town of 10,000 people by courses of instruction in vocational opportunities and personal characteristics. Sophonisba P. Breckenridge, of Chicago, and Charles Marten, of the Jewish Orphan Asylum, Cleveland, discussed the problem from the point of view of placement and follow-up work. Asst. Supt. E. D. Roberts, of Cincinnati, described the continuation schools of Cincinnati as a means of vocational guidance.

In a joint session with the National Society for the Promotion of Industrial Education on the topic, "How shall we study an industry for purpose of vocational education and vocational guidance?" Charles R. Richards, director of Cooper Union, illustrated graphically three typical cases where skill and technical knowledge are required in varying degrees; Frank M. Leavitt, of the University of Chicago, emphasized the point that whatever may be of importance for vocational education, from the standpoint of vocational guidance the prime factor will always be the child, "whose rights will be placed above, far above those of property or the dictates of educational tradition."

AMERICAN SCHOOL HYGIENE ASSOCIATION.

American School Hygiene Association met with the International Congress of School Hygiene, held at Buffalo, N. Y., August 25–30, 1913, at which meeting every phase of the health movement as related to education received both general and special treatment in large meetings and in smaller discussion sections. Topics of the various sessions included: School buildings and their equipment; fatigue and nervousness in school children; exciting and contributory causes of disease and physical defects in school children; child labor; status of school hygiene and methods of instruction in city, village, and country schools; open-air schools; instruction in hygiene; mental hygiene; mouth hygiene; ventilation, heating, and cleaning of school

buildings; mental hygiene and the hygiene of the mentally abnormal child; medical inspection; play and athletics; health supervision of college and university students; crippled children; conservation of vision; the Binet-Simon scale; school illumination; school hygiene in relation to the home and the community; school feeding; tuberculosis among school children; women's clubs in relation to school hygiene; school nurses and school clinics.

NATIONAL ASSOCIATION OF STATE UNIVERSITIES.

The seventeenth annual meeting of the National Association of State Universities convened at Washington, D. C., November, 1912. The standing committee on the national university recommended most strongly that the agitation for such a university be kept up as "steadily and persistently as may be until the movement is crowned with success." The report of the committee on the reorganization of education evoked much interest and discussion. Prof. Charles Hughes Johnson, of the University of Kansas, read a paper on "Some problems of per capita cost of university education," which he illustrated with graphic statistical charts. Dr. P. P. Claxton, United States Commissioner of Education, speaking of the mission of the State university, said:

> The State universities owe it to themselves and to the people whom they serve and who support them to build up good public high schools with four-year courses in all parts of these States. All State universities and all institutions conferring academic degrees should do the same grade of work and require the same standards for admission and graduation.

Dr. R. M. Hughes, acting president of Miami University, presented a paper on "The right of college fraternities to exist in a State-supported institution." President Charles R. Van Hise, of the University of Wisconsin, spoke on the subject of "Self-government at the University of Wisconsin," citing the fact that one of the incidental effects of such self-government was to improve the relations of the students and the faculty. President Alston Ellis, of Ohio University, read a paper on "Minimum credits for the bachelor's degree."

NATIONAL CONFERENCE COMMITTEE ON STANDARDS OF COLLEGES AND SECONDARY SCHOOLS.

The sixth conference of the national conference committee on standards of colleges and secondary schools was held in New York City February 19, 1913. Delegates from the following associations were present: College Entrance Examination Board, the New England Association of Colleges and Preparatory Schools, the New England College Entrance Certificate Board, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the North Central Association of Colleges and Secondary Schools, the Carnegie

Foundation for the Advancement of Teaching, and the Bureau of Education. A subcommittee reported the results of an investigation of the use of the terms "honorable dismissal" and "statement of record," based upon returns from a questionnaire sent to 80 colleges and universities. A resolution was passed defining the proper use of these terms, as follows:

Resolved, that the term "honorable dismissal" should be used to refer to conduct and character only, and that honorable dismissal should never be given unless the student's standing as to conduct and character is such as to entitle him to continuance in the institution granting the dismissal. * * * That the term "statement of record" should be used to refer to the recorded results of a student's work in the classroom, and that this statement should in every instance contain all the important facts pertaining to the student's admission, classification, and scholarship.

The conference passed the following resolution regarding the term "unit," after receiving a report from the above subcommittee, reviewing some of the difficulties discovered in the application of the definition of the unit adopted at the meeting on October 9, 1910:

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high-school course as a basis, and assumes that the length of the school year is from 36 to 40 weeks, that a period is from 40 to 60 minutes in length, and that the study is pursued for 4 or 5 periods a week; but, under ordinary circumstances, a satisfactory year's work in any subject can not be accomplished in less than 120 sixty-minute hours or their equivalent. Schools organized on any other than a four-year basis can, nevertheless, estimate their work in terms of this unit.

A four-year secondary school curriculum should be regarded as representing not more than 16 units of work.

NORTH CENTRAL ASSOCIATION OF COLLEGES AND SECONDARY SCHOOLS.

The eighteenth annual meeting of the North Central Association of Colleges and Secondary Schools was held in Chicago, March 21–22, 1913. The presidential address, by W. J. S. Bryan, contained a brief synopsis of secondary education in England and on the Continent. Dr. Kendric C. Babcock, of the Bureau of Education, read a paper on "The naming of an approved list of colleges." Prof. Frank M. Leavitt, treating the subject of sanity in industrial education, said that inasmuch as 74 per cent of the pupils in the United States do not reach the high school, sanity in industrial training will demand that "it strike its roots deep down into the elementary school."

A committee was appointed to investigate experiments in secondary education involving changes in time schedules of day and year and in grouping of years to form intermediate schools or junior high schools of grades of 7, 8, 9, and 10, and senior high schools of grades 11 and 12 and the freshman and sophomore years in college,

and to suggest measures to be taken for the evaluation of the subjects of the secondary curriculum.

ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS OF THE MIDDLE STATES AND MARYLAND.

The twenty-sixth annual convention of the Association of Colleges and Preparatory Schools of the Middle States and Maryland was held at Philadelphia, Pa., November 29–30, 1912. The general topic of the first session was "The comprehensive examination," which received elaborate treatment in two papers, the first by President A. Lawrence Lowell, of Harvard University, and the second by Dr. E. J. Goodwin, of Packer Collegiate Institute, Brooklyn, N. Y. At the second session Prof. James E. Russell discussed "Professional factors in the training of the high-school teacher," declaring that the vital need to-day in the development of professional training for high-school teachers is the cooperation of the colleges and the schools—of the colleges by way of making suitable preparation for professional study, and of the schools by way of providing adequate means for giving apprentice training under competent guidance. Commissioner Calvin N. Kendall, of New Jersey, discussed "The training of high-school teachers."

The third session of the convention was devoted to an address by the president, Supt. W. H. Maxwell, of New York City, whose topic was, "The attitude of the American parent toward education."

There were round-table conferences on ancient languages, biology, commercial education, modern languages, and school and college libraries. In connection with the meeting of the association there were meetings of the following affiliated bodies: College conference on English in the Central Atlantic States, Association of History Teachers of the Middle States and Maryland, and Association of Teachers of Mathematics of the Middle States and Maryland.

NEW ENGLAND ASSOCIATION OF COLLEGES AND PREPARATORY SCHOOLS.

The twenty-eighth annual meeting of the New England Association of Colleges and Preparatory Schools was held in Cambridge, Mass., October 31–November 1, 1913. Symposiums were held on preparation for teaching in secondary schools and measurements of efficiency in instruction, which were participated in by Chancellor Elmer E. Brown, of New York University, Prof. Raymond MacFarland, William Orr, President A. Lawrence Lowell, of Harvard University, Frank E. Spaulding, and Prof. George D. Strayer.

SECONDARY SCHOOLS IN RELATIONS WITH THE UNIVERSITY OF CHICAGO.

At the twenty-fifth annual conference of the University of Chicago with cooperating secondary schools, held on April 18–19, 1913, the theme of the general sessions and the departmental conferences was "Economy in education." In the conference on biology it was the consensus of opinion that the high-school courses in botany and zoology should be considerably changed, and that the high-school teachers need a different viewpoint. Mr. Whitbeck, in the conference on earth science, presented statistics regarding instruction in geography in Minnesota, Wisconsin, Indiana, and Ohio, which indicated that geography and physiography are mostly taught by persons without any special training in those lines.

The home economies section passed the following resolutions:

(1) That there is need of more definite formulation of high-school courses in the belief that if the need of the high-school girl is really met there will be no duplication in college. (2) That a general science course in the first year of high school is desirable for students of home economies.

The articulation of high-school manual arts courses with general college work was the subject discussed by the manual arts conference.

WESTERN DRAWING AND MANUAL TRAINING ASSOCIATION.

The twentieth annual meeting of the Western Drawing and Manual Training Association was held at Des Moines, Iowa, May 7–10, 1913. A report of the international congress for art education, at Dresden, was given by Nama A. Lathe. Henry Turner Bailey presented some of the advantages of attending the international congress to be held in Paris, 1916. Miss Florence Ward discussed "The place of art and handwork in the Montessori system." "Vocational education in rural schools" was the subject of a paper by G. M. Wilson.

MUSIC TEACHERS' NATIONAL ASSOCIATION.

The thirty-fourth annual meeting of the Music Teachers' National Association was held in Poughkeepsie, N. Y., December 30, 1912, to January 2, 1913. A number of interesting papers were read at the sessions, notably one on "New lights on Beethoven from his conversation books," by Henry E. Krehbiel, of New York, based upon fresh researches now going forward. The history of the organization of the American College of Musicians was presented by Prof. E. M. Bowman. The association, according to custom, held a joint session with the American section of the International Musical Society, at which Prof. Charles H. Mills discussed the history of music degrees, giving the history of such degrees at the English, Scotch, and Irish universities.

AMERICAN PHYSICAL EDUCATION ASSOCIATION.

The twentieth annual convention of the American Physical Education Association was held in Newark, N. J., March 26–27, 1913. The presidential address was delivered by Dr. R. T. McKenzie, who spoke on "The quest for Eldorado." Dr. Henry H. Goddard made an address on "Heredity in relation to efficiency," illustrated by graphic charts. The subject of "New efficiency methods for training the posture of school children," was discussed by Miss Jessie H. Bancroft, who showed the results accomplished in the public elementary schools of Brooklyn, N. Y. Miss Lillian L. Kuester read a paper on "Medical gymnastics as related to college life," based upon data taken from two years' physical examinations of entering students at Mount Holyoke College.

ASSOCIATION OF AMERICAN LAW SCHOOLS.

The thirteenth annual meeting of the Association of American Law Schools was held at Montreal, Canada, September 1–3, 1913. An address on "The teaching of practice and procedure in law schools" was delivered by Edson R. Sunderland, who dwelt on the striking and far-reaching difference in the functions of the colleges of liberal arts and the professional schools. He said:

> The gradually increasing entrance requirements among the better professional schools mean nothing else than a recognition of the truth that such schools are not a part of the general educational system, but are institutions into which the already educated man comes for special training to fit him for a special service.

A joint meeting of the association and the sections of legal education of the American Bar Association was held on September 31, on which occasion former President of the United States William H. Taft gave an able presentation of "The social importance of proper standards for admission to the bar." Among other things he advocated a close study of the science of general and sociological jurisprudence as a basis for the study of the various branches of the law.

The following resolution was adopted by the association:

> *Resolved*, That in the opinion of the Association of American Law Schools the present and future responsibilities of the American legal profession require that the preparation for admission should include at least one or two years of training of a college grade prior to beginning the study of law; and *voted*, that the president and secretary of this association are instructed to transmit a copy of this resolution to the Chief Justice of the Supreme Court, the chairman of the board of bar examiners, and the president of the bar association in each State and Territory, requesting them to use their efforts to bring about such a requirement for admission to the bar in their jurisdictions.

AMERICAN FEDERATION OF ARTS.

The fourth annual convention of the American Federation of Arts was held in Washington, May 15–16, 1913. Two general topics were selected for discussion: "Small art museums" and "Industrial art." The secretary's statement gave the total number of chapters of the federation as 181; 22 traveling exhibitions, which had been shown in 95 places, were reported during the past year. In addition to the publication of *Art and Progress*, the federation assumed the publication of the *American Art Annual* and *Who's Who in Art*. Mr. de Forest, in his presidential address, urged the value of concentrating the work of the federation, and developing and perfecting its present activities—the traveling exhibits, lectures, etc. In discussing the "Small art museums," H. W. Kent, assistant secretary of the Metropolitan Museum of Art, in New York City, gave an interesting historical review of the origin and evolution of the modern small museum, and described the important rôle museums have played in the industrial development of European countries, and how they may be encouraged in the United States. Raymond Wyer, director of the Hackley Art Gallery, of Muskegon, Mich., spoke of the importance of the museum as an adjunct to the educational system of a community in inculcating appreciation of the higher aspects of art. A paper by Ralph A. Cram on "Industrial art" advocated a revival of the artistic spirit of the Middle Ages and dwelt on the importance to the future of American art and civilization in teaching the designer and industrial artist to be industrial workers as well; to engage in the actual production of the things they design. Howard Walker's paper on the "Relation of industrial art to education" laid emphasis on the value and importance of teaching children the elementary principles of design and artistic treatment while they are young.

An instructive exhibit of industrial art, designed to illustrate Mr. Walker's address, comprised several hundred specimens of American handicraft, including the productions of students in public schools and colleges, etc. It consisted of work in silver, wood-carving, textiles, advertising, printing, and every branch of ceramics.

Resolutions were adopted declaring the federation in favor of the creation of State art commissions, and authorizing the appointment of a committee to investigate the question of recommending to Congress the creation of a department of art in the Government.

NATIONAL ASSOCIATION OF TEACHERS IN COLORED SCHOOLS.

The tenth annual session of the National Association of Teachers in Colored Schools was held in Little Rock, Ark., July 30–August 3, 1913. The more intimate and vital problems of negro education are discussed at these meetings. Reports were made of the best public

school work accomplished in rural sections of the South. Leo M. Favrot, State supervisor of colored schools for Arkansas, delivered one of the notable addresses of the occasion. A council of school presidents was formed as a department of the association.

AMERICAN PEACE CONGRESS.

The fourth American Peace Congress met in St. Louis, Mo., May 1–3, 1913. It was a notable gathering of the heads of peace societies, arbitration leagues, and international unions.

One section meeting was devoted to the universities and the peace movement, Louis P. Lochner speaking on "Internationalism among universities," and Mrs. Fannie Fern Andrews on the "Progress of the peace movement through education."

LAKE MOHONK CONFERENCE.

The thirty-first conference of friends of the Indians and other dependent peoples was held at Mohonk Lake, N. Y., October 22–24, 1913. Dr. Elmer E. Brown, former United States Commissioner of Education, presided at the sessions. The first day was devoted to Indian affairs, the second to the Philippines, and the third to Porto Rico, etc. The need for more schools and compulsory attendance among the Indians was urged by H. B. Peairs, general superintendent of Indian schools, who also made a plea for the training of deficient and defective children, for whom there is no place in the present school organization. Prof. Paul Monroe, of Teachers College, Columbia University, outlined the school work in the Philippine Islands. The principal address on Porto Rico was by Rt. Rev. James H. Van Buren, formerly Protestant Episcopal Bishop of Porto Rico.

CHINESE INDEMNITY STUDENTS.

According to the Chinese Educational Mission, there are at present 237 Chinese students in the United States maintained from the indemnity fund. These students obtain their scholarships through competitive examinations.

The distribution of the students is as follows:

University of Wisconsin	21	Norwich	2
University of Michigan	36	Princeton	4
Yale	9	Rennselaer Polytechnic Institute	1
Harvard	12	Worcester Polytechnic Institute	4
Colorado School of Mines	12	George Washington University	2
Clark University	1	Johns Hopkins	1
Massachusetts Institute of Technology	26	Williams College	1
Ohio State University	2	University of Chicago	1
Cornell University	26	West Point	1
Columbia University	16	University of Pittsburgh	2
University of Illinois	21	Stanford University	1
University of California	2	Syracuse University	1
Purdue University	4	New York University	1
University of Virginia	1	University of Pennsylvania	4
Lehigh	9	Armour Institute of Technology	1
		Other institutions	12

As to courses of study pursued, 19 of the Chinese students are taking civil engineering; 4, medicine; 22, mechanical engineering; 24, mining; 3, law; 13, electrical engineering; 15, chemical engineering; 2, sanitary engineering; 2, forestry; 12, agriculture; 6, naval architecture; 4, education; and the rest are enrolled in the regular arts and science courses.

CHAPTER XXVI.

EDUCATIONAL WORK IN THE YOUNG MEN'S CHRISTIAN ASSOCIATIONS.

By George B. Hodge,
Educational Secretary, International Committee of Young Men's Christian Associations.

Contents.—I. Brief history. II. Need, purpose, and nature of association educational work. III. Supervision and administration.

I. BRIEF HISTORY.

1. Early antecedents.—From the very inception of the Young Men's Christian Association some educational features have been connected with its development. To understand its introduction it seems desirable for us to glance back into the seventeenth century. As early as 1694 there were "mutual improvement societies" in which some of our present general types of educational work were carried on in both America and England. From 1800 to 1850 numerous "mechanic's institutes" flourished on both sides of the Atlantic, with strong organizations, sufficient funds, and most laudable objects—"To diffuse knowledge and information throughout the mechanic classes, found lectures on mechanical, chemical, and science subjects, create libraries and museums, and establish schools for their growth." Scarcely a trace of them remains.

Large numbers of societies of young men for mutual development have flourished and almost as speedily have died. The experience of the past 200 years seems to indicate that "voluntary efforts to promote the moral and intellectual life of young men by organizations or societies which set aside the spiritual have greatly disappointed their promotors." Amid the network of such organizations the Young Men's Christian Association was born in London in 1844. It was but natural that some of the educational activities of the coexisting societies should be introduced into association efforts.

2. In London.—In the parent association in London the first educational feature recorded is that of the Exeter Hall lecture course in 1845. Although begun with the sole idea of benefiting men spiritually, the London association at its regular semiannual meeting in December, 1845, reported the organization and conduct during that

fall and winter of the Exeter Hall educational lectures and the formation of mutual improvement or literary societies, "In order to bring under the influence of the association young men who could not be reached by the directly religious agencies." Four years later library and reading-room facilities began to be provided. Class work privileges were not organized until 1853. The recorded sentiment of the committee in starting the work is as true to-day as then:

> We desired to provide for the members and their friends all that could tend to the enlargement of the mind, the cultivation of the judgment, and the consecration of the heart.

In this connection we note, first, the primary object in founding the association was the religious life of men; second, the first efforts to help men in daily life were educational, including lectures, clubs, reading rooms, libraries, and class work; third, earnest care was taken in all these steps that these so-called secular agencies be kept closely as auxiliaries to, not substitutes for, the main object of the association.

While some excellent service has been rendered in many associations in England and Scotland, and in continental Europe, comparatively little effort has been made to extend the educational work of the many English, German, and French associations. The result is that other organizations, such as polytechnics and various kinds of institutes, have occupied the field and are doing splendid service. The Young Men's Christian Associations have thus lost a large measure of their educational opportunities during the past 60 years.

3. In North America.—(*a*) 1851–1866; the period of apathy. The first North American associations were organized in 1851, at Montreal and Boston. Little available material is found in written records concerning the work for the first 15 years of its growth. In August, 1855, the report of the world's conference at Paris states that educational facilities were offered to some extent in a few associations of America, as well as in those in England, and that they comprised libraries, literary societies, reading rooms, lectures, and a few evening classes in Greek, music, and arithmetic. Some of these features were reported from Boston, Montreal, and New York.

Little effort was made to help men by educational work until 35 years after the planting of the association on American soil—until after the first generation of its American founders and promoters had passed away. It appears that during those early years the zeal of the American leaders for the religious work was very prominent, and they feared that the so-called secular features might choke or destroy the religious influence of the association. They did not, therefore, encourage educational work.

At the New Orleans convention in 1860 there were reported 48 libraries, 38 reading rooms, 18 literary societies, language and music

classes, evening and mission schools. There were more classes in music, Greek, and Latin than in all other subjects combined. Much emphasis was given to the work of the literary societies. In 1866 the records show that four associations in America reported 60 students in class work.

(*b*) 1866–1880; the period of toleration. For the most part the various educational features were regarded as side issues of the association and were left to take care of themselves. Educational work was neither promoted nor encouraged. Records show a slow but steady growth in the number of reading rooms, libraries, lectures, and a few literary societies. Class work was very largely confined to a study of the dead languages and often limited to divinity students. The association has always strongly encouraged the work and preparation of men for the ministry.

With the beginning of the four-fold work in the New York association building in 1870, under the leadership of Mr. Robert R. McBurney, the first visible signs appeared of definite plans in building and equipment for association work. This building was the first one in the world designed with any special reference to association service. It provided a large room well located for use as a library, and for 30 years that association library exerted a very large and helpful influence in New York among students and men of all classes. It also provided splendid quarters for its literary society and for other forms of educational club work, and there were two or three rooms especially for evening classes.

Gradually the conception grew that the most efficient association work as a whole was for the development of the all-round man—spiritual, educational, physical, and social. Similarly there followed the conception that the educational work for boys and men should supplement the existing educational privileges of a community, placing emphasis upon: (1) The use of the reading room with its standard periodicals, (2) cultivating the habit of reading good books in the library, (3) promoting literary societies and all forms of educational clubs, (4) developing the educational lectures and practical talks, and (5) conducting such appropriate practical class work as was needed to meet the needs or desires of men and boys in their leisure hours.

(*c*) 1880–1893; the period of awakening and new interest. Some effort toward encouraging the work in various directions began to be seen. Educational work, however, simply existed, waiting for its value to be appreciated and for steps to be taken to develop and encourage it. The subject first appeared at State conventions in 1887, when some emphasis was placed upon its definite promotion and its more dignified conduct by local associations, as an opportunity for larger service, as a responsibility to men and the community, and as

a source of large dividends in the promotion of character building. In 1889 the subject of association educational work for the first time came before the international convention. A number of leaders with wisdom and foresight began to encourage the definite and systematic promotion of this work. By the end of this period (i. e., 1893) the majority of the associations had libraries and reading rooms, a number conducted societies and lectures, and over 100 reported evening classes, with a total of over 10,000 different men as students. Increasing attention was given to these features each year. The "practical talk" was introduced with much success. Educational clubs were expanded in variety and novelty. Class work was developed in commercial and language subjects. A beginning was seen in industrial and scientific subjects during the last year or two of this period.

(*d*) 1893–1900; the period of encouragement. At the beginning of this period of encouragement and development of the work as a whole, the international committee added a department of its service with an educational secretary to promote appropriate educational work among the several associations. Principles were studied, experience of all forms of supplementary educational work were gathered, and suggestions were drawn for the benefit of the associations. An advanced step was taken when a few associations employed special secretaries to give particular attention to this work, thus marking the beginning of a new epoch. The successful features and methods for good work were gradually selected and brought to the attention of the associations by means of printed matter, addresses, conferences, and correspondents. Similarly, unsuccessful features and methods were discouraged, and all that concerned the efficiency of association educational work received attention.

Special effort among boys was begun, and the educational department gradually came to be regarded more as a vital part of the association movement. It ceased to be a side issue with the majority of leaders. Increasing effort was made to discover definite and particular needs of men and boys, and the work was placed on a much stronger financial basis by charging a small tuition fee for class work.

Increasing interest was taken in many forms of applied science as related to manufacture, industry, and trade. A system of international examinations was inaugurated in 1896 which materially strengthened the quality of work done and increased the respect and support of the public. Educational institutions began to encourage and commend the association, instead of criticising its educational efforts, as they had formerly done.

In promoting the work during this period the international committee made large use of exhibits at State and international conventions. The first of the educational exhibits recommended by the

committee was in connection with the State conventions of Connecticut and New York, in February, 1893. The New York State exhibit comprised a few drawings and exercises in arithmetic and bookkeeping from six or eight associations, and was arranged on settees in a small parlor in the basement of the church in Saratoga Springs, which entertained the convention. It was such a modest affair that it was deemed wise not to call the attention of the delegates publicly to it. One by one, however, many of the delegates saw it and gained interest and information from it. At the international convention of May, 1893, the first international exhibit was held at Indianapolis, and at the close of the convention it was transferred to the World's Fair in Chicago. From that source the associations of the country in those days gained much helpful inspiration, for at least 300,000 people studied the exhibit. Later exhibits were made at the conventions, in 1895 at Springfield, Mass.; in 1897 at Mobile; in 1899 at Grand Rapids; and the series culminated with the jubilee exhibit at Boston in 1901, where 136 different associations participated, with 60,000 pieces of exhibit material. Traveling exhibits were used with advantage from 1893 to 1897.

During this period much attention was given to unifying and placing the class work upon a more solid and systematic basis. The greater need seemed to be in that direction. From desultory and disorganized work there has gradually grown a regular system of supplementary educational work under association auspices with more or less definite courses of study, more and more experienced teachers paid for efficient service, and with a quality of work which is encouraged and helpfully maintained by the international educational examinations.

(*e*) 1900 to date, the period of expansion. The present period is one of expansion and extension. The general objects, principles, methods, and policies are continued with ever better quality, increased interest, and larger value. Spring terms are added to the winter work, and day service becomes more prominent as an expansion of the evening work. Summer schools for boys during July and August are conducted in increasing numbers. Special schools of many kinds have had their birth in the association in the effort to meet present day needs of men and boys—as automobile, accounting, art and decoration, salesmanship, advertising, insurance, real estate, textile designing, plumbing, fruit culture, poultry raising, and many others.

Work outside the building has begun to grow rapidly. Much interest is taken in new forms of industrial education and vocational training; various features pertaining to agriculture, gardening, live stock, and scores of the newer vocations claim increasing attention.

Local supervision increases in extent and in the efficiency of service. Some State supervision is given with splendid results. Increased emphasis is placed on quality of service, rather than quantity; to develop intensively rather than extensively; on the higher and more efficient training of educational secretaries, and on Christian character building among both men and boys.

II. NEED, PURPOSE, AND NATURE OF ASSOCIATION EDUCATIONAL WORK.

1. Need.—We believe in the American public-school system with its unbroken course from the kindergarten to the university. Only when these opportunities are used universally and effectively can best dividends be realized. But the majority of men and boys have not profited as much as they should by the great wealth of public-school facilities.

When we learn from authorities that two-thirds of the boys have left school by the end of the eighth grade; that the average length of a boy's schooling is less than six years; that only 5 per cent of all males are fitted by definite educational training for their vocations; that illiteracy among voters in the United States is many times more prevalent than in England, Scotland, or many other nations; that there is much less opportunity here for vocational training than in other nations—then we may realize the great need for supplementary educational facilities for men and boys in America.

2. Purpose.—To meet the demands of our present day complex civilization, there is great opportunity for the service of individuals, of clubs, of the church, and of the Young Men's Christian Associations. All forms of supplementary agencies for training men and boys may well be enlarged to encourage, strengthen, and expand the usefulness of the public schools. As the church, through the past 200 years, has so often wisely led in providing educational training through college, technical schools, and other appropriate features, so its leaders through the associations are now striving to help meet the need of the time. The purpose in so doing is to develop Christian manhood; to help men and boys help themselves; to inspire them to higher ideals of life and service; to acquaint them with, and help them wisely to develop, their own capabilities; to increase habits of industry and thrift; and to prepare them to render more easily, willingly, and effectively the highest type of industrial, social, and Christian service.

Association educational work thus encourages and strengthens other good forms of educational work; improves citizenship and assists commerce and trade through appropriate facilities offered at any time of the day or night, and it places emphasis upon Christian character building as fundamental.

3. Scope and nature of the work.—Many years of experience in an ever-enlarging program of practical educational activities, conducted either in the association building or outside of it, have developed the following general classes of privileges. The figures presented are for the school year 1912–13:

(*a*) Reading rooms. The association provides, cares for, and encourages the careful reading of the best periodicals, magazines, technical and trade journals. Nearly 1,000,000 persons enjoy this privilege daily.

(*b*) Books and libraries. The reading of good books is constantly stimulated. The working library for study and research is the means of most efficient and permanent educational service. Public and private libraries are used increasingly; 700,000 good books were read.

(*c*) Educational lectures. Formal high-grade lectures for mixed audiences, and with paid speakers of national reputation, are promoted; 3,412 such lectures were given.

(*d*) Practical talks. Informal talks or demonstrations are given by local talent to small groups at any time or place, day or night; 7,700 were given, attended by 416,000 employed men and boys.

(*e*) Educational tours. Weekly or monthly trips to places of historical, social, industrial, scientific, or religious interest are enjoyed under competent leadership.

(*f*) Educational clubs. Many different kinds are promoted for research, study, discussion, reading, and service. There are 1,023 such groups, with 23,821 members.

(*g*) Class-lecture series. Professional, semiprofessional, and vocational subjects for mature men are handled by experienced teachers and leaders. Tuition fees are charged, which usually more than cover the expenses. The work requires much reading, discussion, conversation, and demonstration. Such courses include law, accountancy, real estate, advertising, salesmanship, fruit culture, credit work, poultry raising, eugenics, and the like. Over 7,300 business and college men are students in such courses.

(*h*) Educational classes. These include commercial, industrial, trade, academic, language, and high-school subjects, taught by experienced and successful men teachers. The courses usually run during a term of 25 sessions or during the entire year of 80 or 100 sessions. Students pay tuition fees of varying amounts, depending upon the subject and the expense of its conduct. In elementary subjects the fee does not, and should not, cover the expenses. Instruction is given in 120 subjects to 72,842 employed men and boys by 2,646 teachers. The students pay $714,035 in tuition fees.

(*i*) Tutoring. In addition to the work in the classroom, the association often arranges with some teacher to meet the individual

needs of a student seeking personal instruction. Such fees are 50 cents or more per hour.

(*j*) Individual altruistic service. Aside from the above standard activities, many associations, through whole-souled Christian teachers and leaders, conduct unadvertised altruistic service, in which each person gladly invests some of his time and effort with no thought of financial return, to help, to teach, and to be a real friend of some other person, like the spirit and practice of the big-brother movement. The amount of such service now rendered is very large and increasing, but there is opportunity for its infinite expansion.

(*k*) Extension features. Over 100 associations are helping to meet educational needs of men and boys outside the association building, using the above features in various kinds of city centers as in shops, offices, stores, homes, clubs, rented halls, school buildings, and other places. Over 100,000 men and boys were thus aided.

(*l*) Coming Americans. Many associations are teaching non-English-speaking males in commercial and industrial life to speak, read, and write in English. As far as possible, and by wise counsel and instruction, they are led into intelligent American citizenship. Over 15,000 students were thus aided.

(*m*) Day privileges. In addition to the evening facilities a number of associations now conduct regularly organized educational privileges in the daytime, including various kinds of schools, courses, and subjects for males of all ages over 14. About 7,000 are enrolled.

(*n*) Among special groups. While the great majority of this supplementary practical educational work is conducted for city men and boys in general, yet there is a growing work with similar privileges among each of the following groups of men and boys: Railroad employees, the Army and Navy, industrial workers, farmers, negroes, Indians, and college students.

(*o*) Among boys. A large and growing movement with over 16,000 boys already enrolled in definite evening classwork is in operation. Employed boys, who have left the public schools and among whom there is such need for educational training, form the largest single opportunity. Over 11,600 of these are now in association classes. About 2,000 boys are studying in association camp schools, and over 4,000 in vacation or summer schools in association buildings.

(*p*) Vocational training. Such subjects as industrial education, continuation schools, apprentice schools, vocational guidance, etc., are demanding large and increasing attention. The associations find here a favorable field for service, and are already making commendable progress. About 35,000 men and boys are in these various courses under association auspices.

In 1893, at Springfield, Ohio, W. J. Frazer, the general secretary, and D. F. Graham, a skilled mechanic, both with a conviction that the association should help men in the industrial vocations, conducted courses in patternmaking, toolmaking, and cabinetwork, supplemented with mechanical drawing and shop mathematics. That was the beginning of vocational training along industrial lines in the association.

III. SUPERVISION AND ADMINISTRATION.

With the growth of this educational movement there comes increasing demand for competent and trained leadership. The annual expenses of this educational work in North America for the school year 1912–13 were nearly $1,000,000; tuition receipts from students were $714,000. The problems of securing the 2,600 paid teachers and over 2,000 volunteer leaders, of maturing plans for meeting discovered needs, and of successfully cooperating with the all-round association work require the highest qualities of local educational leadership.

1. Local supervision.—In 1892 Mr. Edwin F. See, the general secretary at Brooklyn, N. Y., asked Mr. W. H. Coughlin, who for two years had been teaching free-hand drawing in that association, to give one-half of his entire time to promoting the educational features of the association. He thus served two years on half time, and from 1894 for 12 years gave full time to such work; he was then made librarian of the association and educational secretary "emeritus." Thus began the work of the educational secretaryship.

In 1894 the Hartford, Conn., association employed Mr. N. P. Work, at first for part time and then for full time, to promote such work. In the same year Mr. W. M. Wood began like service in the Chicago association, giving his entire time to it. No person in those years did more than he to help associations appreciate the value of supplementary educational work among men and boys. W. M. Sherman in the same year, on part time at first, began promoting such work at the Tweny-third Street branch, New York. In 1896 Mr. F. P. Speare became educational secretary of Boston, in which capacity he still serves, and Mr. W. F. Hirsch began in Buffalo. In 1898 J. F. Hill entered similar work at Cambridge, E. A. Purdy in Minneapolis, Abram Ebersole in St. Louis, W. B. Van Akin in Detroit, and A. A. Macurda in San Francisco.

These were the beginnings of local supervision of educational work in Young Men's Christian Associations. Before 1896 there were but five educational secretaries. Their salaries ranged from $400 to $1,100; they had no stenographic or clerical help, and they served from 10 to 14 hours per day, with no "time off." Now, (October, 1913) each of the 80 associations with educational super-

vision has from 1 to 10 men employed for their entire time either as secretaries or as heads of departments of instruction or as teachers. The salaries for the senior secretaries range from $1,200 to over $2,500; they usually have stenographic help; they spend about nine hours per day at their work; and they have one day and often two or more evenings per week for themselves.

Of these 80 senior educational secretaries, 16 are between 20 and 30 years of age, 40 are between 30 and 40, nineteen are between 40 and 50, and 4 are over 50. As to their period of service, 25 have served a minimum of two years previous to 1913, 23 have served three years; 18 four years, 16 five years, 12 six years, 11 seven years, 8 eight years, 8 nine years, 3 thirteen years, and 2 others for sixteen years or more. The average length of service of these men is a little over five years.

Of 47 senior educational secretaries who have served two years or more and have then left the position, 25 per cent have entered business, 30 per cent have entered the various professions, and 45 per cent have entered other positions in the association, most of them becoming general secretaries. Indeed, from the ranks of educational secretaries a larger relative proportion of general secretaries have been drawn than from the physical, boys', and religious work secretaries combined.

Among the conditions and qualities which have held men in this work, often declining offers of larger salaries, are the following: (*a*) Strong Christian character and a deep conviction concerning the place of the association in helping boys and men; (*b*) encouragement and cooperation from the secretary, the board, and other officers; (*c*) qualities of successful teamwork, including helpful cooperation with other departments; (*d*) patience, tact, faithfulness, foresight; (*e*) a firm belief in quality of service rather than in quantity; (*f*) a realization of the cumulative value of continuous service in educational work—a fact of greater importance than in any other department, because of the growing standards in educational matters recognized by the public. Naturally these ideal conditions and qualities are not always found, and some of the educational secretaries have discontinued the work because of the lack of them.

2. State supervision.—In 1899 George S. Budd was employed by the State committee of Massachusetts and Rhode Island to encourage and promote association educational work throughout the associations of the two States. He gave his entire time to wise promotive effort. This proved to be an excellent step. In 1903, being called to the State secretaryship of Ohio, he was succeeded by A. G. Bookwalter, who efficiently served in that capacity seven years, when he in turn

became State secretary of Ohio. Mr. W. C. Smith succeeded Mr. Bookwalter in Massachusetts and Rhode Island in 1910.

Following the example of Massachusetts, the State committee of Ohio in 1901 employed George B. Landis as State educational secretary. With the exception of the interval 1904–5, Mr. Landis successfully served until 1908. Ohio will soon add another man to the State force. In 1912 Pennsylvania secured Mr. Landis as its State educational secretary. In 1907 New Jersey State committee similarly employed M. A. Leiper. He served one year. In 1910 the New York State committee employed E. C. Myers to give half time as its State educational secretary; he resigned May 1, 1911.

Money invested in the right kind of men to promote educational work proves to be one of the best investments that can be made by any State committee. Such service strengthens the large associations and materially aids the smaller ones.

3. International supervision.—In 1893 the educational department of the international committee began its service with George B. Hodge as educational secretary. He still serves the committee in that capacity. In 1899 A. G. Bookwalter was added to the force. He served two years and was succeeded by George A. Gregg, who served until 1906, when he became the educational secretary in Seoul, Korea. In 1907 Mr. R. T. Hill began giving part time to educational work among boys and he served until December, 1911. In 1907 Mr. W. J. Lamkie began with the Army and Navy department of the committee's work and served until May, 1911. In 1907 Mr. R. C. Morse, jr., began service as railroad educational secretary on the Gould lines, with headquarters in St. Louis. After two years he was succeeded by Mr. F. M. M. Richardson, who has recently been transferred to the position of railroad educational secretary of the international committee, with headquarters in New York. In May, 1911, Mr. R. P. Kaighn began promoting appropriate educational features among industrial workers under the auspices of the industrial department of the international committee.

To continue and increase this kind of cooperative educational service the international committee greatly needs financial support to secure additional men to meet the demands upon it. Two or more strong and experienced men are necessary in the general work of the educational department to supplement the efforts of Mr. Hodge. One more is necessary to give special attention to this work among employed boys; another to similarly promote association day schools; another to give special attention to similar work in rural districts; another for similar service among negroes; and one more for special work in the Army and Navy associations.

4. Educational secretaries' association.—To promote the interests of association educational work the educational secretaries' association

was organized in 1895 at Springfield, Mass. Sessions have been held in connection with the international conventions or with the employed officers' conferences each year to the present time. The membership has grown from 5 to 65. The gatherings of this group were in 1902 at Mountain Lake Park, Md.; in 1903 at Lakewood, N. Y.; 1904 at Buffalo; 1905 at Niagara Falls; 1906 at Indianapolis; 1907 at Washington; 1908 at Atlantic City; and 1912 at Silver Bay, N. Y.

5. Necessity for training.—Men who succeed in the majority of positions to-day are those who have been obliged to give from 5 to 10 years to a study of the history, principles, and policies governing the work of the position held. The day is past when the "jack-of-all-trades" can accomplish much in any vocation, much less in modern association service.

To this end the association training schools at Chicago and at Springfield, Mass., are giving more thought each year. The training centers in a few local associations afford opportunity for some such study of educational work. The book, Association Educational Work for Men and Boys, published by the Y. M. C. A. Press, is the most complete handbook yet provided for such study by individuals, either alone, in training centers, in summer schools, or elsewhere.

The summer schools for educational secretaries at Silver Bay and Lake Geneva afford a rare opportunity for conference, study, interviews, and training. About one-half the educational secretaries attend these summer schools. The following is a brief outline of the topics covered annually in August at Silver Bay, N. Y., in a three-year course for educational secretaries. The course is adapted to meet the experience and maturity of the men. It includes systematic work five periods per day, one of which is in the Bible study, one in association principles and fundamentals, and three in technical educational topics. The work is made more and more helpful and practical each succeeding year. A similar course, at present covering the first two years, is given at Lake Geneva, Wis., annually in July.

SUMMER COURSE FOR EDUCATIONAL SECRETARIES.

First year.—This course is limited to association officers and others who have had but little experience. It involves 1 daily session in Bible study; 1 in association principles; 8 sessions on fundamental educational principles; 10 on educational features; and 15 on methods. It includes such topics as how to study the field; how to advertise; how to secure teachers; how to organize and conduct classwork; the educational secretary, his qualifications and duties; finances; and many other topics.

Second year.—This course is limited to those who have completed the first-year course or its equivalent in a number of years in successful service. It includes 1 session daily in Bible study; 10 sessions on history, principles and pedagogy of association educational work; 10 on educational features and their extension; and 12 on administration and conduct. It includes such topics as

association pedagogy, industrial education, apprentice schools, the budget, textbooks and courses, daywork, vocational guidance, special schools, and others.

Third year.—The course is limited to those who have completed the work of the second year. In addition to Bible study daily, it includes 8 sessions on supervision, history, and principles; 10 on features, problems, and administration; and 16 on seminar work. Each student must prepare a thesis, which he is required to defend before the institute for one or two sessions. The course also includes some advanced problems, conferences, and work, with one or more outside authorities. Satisfactory completion of the requirements for the three-years' course entitles one to receive the honors of graduation; 17 men have won such honors in the past three years.

6. International examinations.—Written tests are valuable exercises in association work. They have proven beneficial for the following reasons: They have served as a helpful stimulus to teachers and students; they encourage much more thoroughness and definiteness in the work; they are valuable exercises in written English, since they require concise, clear, and accurate statements; they reveal to the students their own weaknesses and defects, as well as their abilities and successes; they demand concentration of mind, sustained mental effort, and a ready use of one's resources. Unquestionably they are also valuable as educational discipline.

The international examinations are regularly held the first week in April, the first week in June, and the third week in December. While these written tests are not obligatory, 136 different associations took them last year: 4,000 men and boys participated; and 2,153 certificates were won.

Definite regulations concerning dates and the conduct of the tests are necessarily clearly stated and carefully followed. Associations desiring to take part must send in their order for question papers before certain dates; the tests must be given on the exact date specified or the results are not accepted; each student must have a copy of the questions direct from the international committee; papers marked 65 or more by local examiners must reach the international committee within 10 days after the test; final papers passing the international examiner at 75 or more are entitled to certificates. A fee must be paid by each applicant, amounting to 25 cents per question for elementary tests and 50 cents for each advanced test.

The standard courses of study given in the 142-page book, Outlines of Courses of Study, published by Association Press, New York, embrace the essential principles of over 100 subjects as applied in the best evening schools in America and Europe; and the examination covers those fundamental principles. For each of the courses there is an examiner whose final statement is accepted by the international committee.

7. Then and now.—When the international committee began to encourage, unify, and promote this work in 1893, it was crude and

superficial and the interest was indifferent. There were only a few courses and these mostly in commercial and language subjects, and they were very poorly attended; there were only a handful of poorly paid teachers; little or no public respect was accorded them, and no encouragement was received from educators; but few students attended, and those were nearly all in the elementery subjects; it was regarded only as a side issue and not a regular part of the association work; it had no special provisions in buildings or equipment and no tuition receipts.

Now there are over 130 courses, industrial, trade, and vocational, as well as commercial and language; the attendance is more regular than that of public evening schools; there is increasingly favorable public sentiment and more cooperation from educators; nearly six times as many regular students attend, including business men and college graduates, in addition to those in the three R's; the work is regarded as a vital part of association work, instead of as a side issue; many large and specially designed buildings provide accommodations and equipment; and receipts from tuition fees alone provide 65 per cent of the expenses of a work that is 15 times as large as 19 years ago.

8. In foreign lands.—The relation of the international committee to the various association interests in many foreign nations, as China, Japan, India, South America, Africa, Turkey, etc., is such that more and more these nations are seeking and using men, methods, and policies from the North American associations. While the educational work in such foreign associations is now comparatively small, with appropriate leadership and support it will become one of the strongest elements in the development of efficient Christian manhood and boyhood in those nations. There are already more than a thousand teachers giving instruction to over 15,000 students in associations in foreign lands.

CHAPTER XXVII.

MOTION PICTURES AS AN AID TO EDUCATION.

By Alfred H. Saunders,

Editor of "Moving Picture News," New York City.

Contents.—Development of motion pictures—Cinematography in education—Obstacles to the use of films in schools—Homemade films are entirely practicable—Some of the advocates of motion pictures—Motion pictures in color—Conclusion.

DEVELOPMENT OF MOTION PICTURES.

The first photograph of the human face in motion was exhibited in a photographer's window in Sloane Street, London, England, in 1889. This crude attempt was made under great difficulties. William Friese Greene, the experimenter, made his own film, emulsionized it, cut it into 20 or 25 foot lengths, and projected it with the same mechanism he had used in his camera for making the negatives. The experiment was largely commented upon in the papers of the time. This was a decided advance upon the zoetrope and Edward Muybridge's experiments with a battery of cameras whose shutters were released by snapping a series of threads as trotting horses passed and broke them.

Simultaneously with Greene in England, Thomas A. Edison was making his experiments in America with the kinetoscope. The American Mutoscope Co. also brought out their machine about the same time. In the kinetoscope the pictures were arranged on long strips of paper which moved rapidly before the eye of the observer who peered through a lens. The mutoscope was also arranged for a single observer, but in it photographs on paper were attached to the edge of a wheel which in revolving flicked the pictures into view as one would flick a pack of cards from the edges. Both these machines were extensively used at fairs and "penny arcades."

It was only when George Eastman perfected the film so well known at the present day, that cinematography made any material advance, for the long film made it possible for the first time to get satisfactory results. Then the Messrs. Lumiere, in Lyon, France, made their machine for projection on the screen. The Messrs. Gaumont followed. Simultaneously Marey and Demeney, of Paris, began their experi-

ments, making great improvement in the mechanism of both the camera and the projecting machines. During the next five years makers of cameras and of projectors sprang up everywhere, each vying with the other to do something better than his fellow. From 25-foot lengths the film was extended to 50. Then a method of joining was discovered, which made it possible gradually to increase the length of the negative film to 200, 300, or 400 feet, and the positive to the present-day reel of 1,000 feet.

The popularity of cinematography (the name was coined by the French manufacturers) grew so rapidly that the manufacturers could not supply the demand and the showmen became manufacturers. At the present day, pictures and machines are made in every quarter of the two hemispheres.

At first the pictures were mediocre in quality and ridiculous in treatment. They were almost exclusively devoted to comedy of the "slap-stick" type. The novelty of movement in pictures was so great that the quality of the subjects was overlooked. The public soon tired of such pictures however, and in response to the evident demand, manufacturers in England began to photograph scenery, pleasure resorts, seaside views, fire-brigade drills, and the like. The example was followed in other countries, and a high degree of excellence was attained, especially in France.

The Boer War gave the first real impetus to the industry. Mr. Charles Urban, of London, dispatched to South Africa a staff of photographers, who sent their negatives to England for development; and all over the world scenes of the war were flashed on thousands of screens. Thus originated the "moving-picture bulletin," or animated newspaper. Since then, practically every important event in the world's history has been written on cinematograph film, instructing thousands in a language that can be understood by people of every nationality.

During the period of progress, it was often difficult to find suitable subjects, and anything the manufacturers chose to foist upon the public was exhibited by the showmen. Many of the subjects were French, and they may or may not have satisfied French audiences; but when they were imported to America and England some of them proved to be entirely too broad for the more particular tastes of those countries.

Gradually the practice arose of forming stock companies to act complete plays under the direction of full-fledged stage managers. A new profession grew out of this change, that of scenario writing. At first, the manufacturers exercised little care in the selection of "plays," and apparently took anything that was submitted to them, paying from $5 to $15 for a "script." These were frequently based upon train robberies, hold-ups, burglaries, shootings, murders, elope-

ments, and domestic infelicities more or less questionable in tone. These films were made by the thousands, until an outraged public raised a protest, and the authorities of various cities began to censor some of the most flagrant violations of decency. Then pictures of cowboys, "Wild West" stories, made-up Indians, and similar subjects were made to head the list. These are now rapidly dying out, and elaborate and carefully staged pictures, such as biblical, mythological, historical, and classical plays are now given prominence.

During the process of evolution has come the demand of intelligent audiences for a larger number of high-class films. Charles Urban, of London, has been notably successful in meeting this demand. He saw the need and has tried faithfully to supply it. Pathé Freres, Gaumont, and Eclair, of Paris and America, are ably supporting him, and to-day a great number of excellent scientific, artistic, historical, religious, and other films are available for educational purposes.

CINEMATOGRAPHY IN EDUCATION.

A canvass was made a short while ago by a New York daily newspaper of thousands of schools, colleges, and other institutions of learning throughout the United States. It was found that the institutions were nearly unanimous in favor of teaching by cinematography; and the prediction was made by most of them that the day was close at hand when they would all consider the cinematograph projector and film as an indispensable part of their equipment.

It is contended that the eye grasps facts more quickly and retains them for a longer time than the ear. A class instructed by demonstration and illustration is far better equipped than the class depending upon the spoken word alone. It is possible to illustrate with the moving picture almost every subject, from the kindergarten to the university, inclusive, and pictures could easily be made to follow the textbooks.

In preparing scientific films for general use the greatest difficulty is to make them in such a way that they can be easily understood. In the films of history and classical literature there is another and graver danger—that of misrepresenting facts. There have been many such films made which are useless for educational purposes for that reason alone. Many a director has sacrificed truth because he thought the story could be more dramatic or because in some way it suited his purpose better if changed. Imagine the doubt in the minds of school children. In more than one actual instance in the New York schools the question has been asked by pupils whether the moving picture or the textbook was correct. The exhibition of such films should not be allowed. So important is the matter that the board of education in every city or town should have the power to prohibit

the exhibition of them. Whether of art, science, history, or literature, the pictures must be correct in every detail.

Films available for educational purposes are manufactured by several foreign firms, who ship them to this country, and through various agencies endeavor to create a demand for their wares. But the business of distribution is practically in the hands of a few men, who are making greater profit from the amusement side, and little advance has been made in introducing strictly educational films. No manufacturer in this country is enterprising enough to make any quantity of such films. Nevertheless, the films already available cover a large field and are easily procurable from England, France, Germany, and Italy. Those made in America are confined almost entirely to experiments with chemicals and liquid air and a small number on subjects in hygiene. A few made under the supervision of scientists are not available for general use.

The following is a partial list of subjects upon which excellent films may be obtained:

Aeronautics
Agriculture
Applied sciences
Apiculture
Archeology
Architecture
Army and Navy
Athletics
Ballooning
Chemistry
Classics
Dances (both civilized and barbaric)
Fine arts
Fisheries
Forestry
Geography
Geology
History
Hydraulics
Hydrography
Industries
Literature
Mechanics
Microscopics
Mining
Music
Mythology
Natural sciences
Optics
Physics
Pisciculture
Physical culture
Railways
Scenic views
Seismology
Sports of various countries
Surgery
Travels
Volcanoes

Each of these headings may be more fully amplified. Agriculture includes such subjects as irrigation, works on new farms, clearing the land by donkey engines, blasting tree stumps and rocks with dynamite, sowing wheat, reaping, thrashing, etc., potato culture, cattle ranching, rice culture, growing stalks, transplanting, irrigating, milling; modern methods of mowing and haying; corn and wheat harvesting; sheep ranching, shearing and gathering wool; cider making; culture of tobacco; cotton cultivation; the maple-sugar industry; pine-apple industry; mushroom culture; tea planting, and numerous others.

Aviation and aeronautics show balloon ascensions and panoramic views taken from them of the country beneath. Spencer, Santos Dumont, Phillips, Forman, Wilbur Wright, and practically the whole army of aviators and their flying machines contribute to these subjects. Count Zeppelin's various models of dirigible balloons are also

represented. Then there are the war balloons and dirigibles of several countries, and the events of aero clubs.

The industries pictured cover a wide range. The titles of some of the subjects are: Wood carving, chain making, clog making, constructing locomotives, glue making, ice harvesting, working of steam laundry, making pottery, manufacturing barrels, manufacturing steel rails, charcoal making, and marble quarrying. Manufacturers adding to this list from to-day are covering every conceivable field lending itself to reproduction by the camera.

Under "Ancient and modern architecture" are found, in many pictures, ruins all over the world. Ancient Rome, the Forum, the Coliseum, Athens and the Acropolis, ancient Sicily, Pompeii, ancient castles, fountains of Rome, the Alhambra, abbeys and cathedrals from the earliest years of the Christian era to the present day.

Army pictures illustrate all branches of the service in practically every country. Naval films cover the various navies, their battleships and maneuvers, the launching of war vessels, the life and drills of the sailors, and the life and drills of cadets at the naval academies.

"Natural science" covers an immense field: The life history of the moth, showing the laying and the hatching of the eggs, the feeding and development of the caterpillar, the weaving of the cocoon, and the final emerging of the moth; the gradual development from the early stages of the embryo of the chick, shown by the X ray, to the hatching; various wild birds in their natural surroundings, their nests, young, etc.; the growth and blossoming of flowers. Innumerable pictures of all sorts of animals, both wild and tame, belong in this list, besides the many of inanimate nature.

Pisciculture and fisheries are represented by pictures taken in many parts of the world. Some of the subjects are: The Scotch herring fishery; Rogie Falls and salmon fishing; fish traps, Columbia River; hauling in a big catch; hauling in seines and pulling seines into the boat; unloading fish at cannery; catching trout for spawning; spawning trout; hauling in nets at Vancouver; trapping salmon on the Fraser River, B. C.; tunny; quail fishing; angling in Norway.

Among the most interesting and the most wonderful are the microscopical pictures taken with cameras fitted with microscopical attachments. A few of the subjects are: The amoeba; circulation of protoplasm; circulation of blood in a frog's leg; circulation of blood in the tail of a gold fish; ciliary movement in the gills of a mussel; typhoid bacteria; cheese mites; head of a house fly; paramecium; young oysters; living bacteria.

Railroad films are gathered from many sources. They comprise those taken of the various workshops, where all parts of the cars and locomotives are made; the preparing of roadbeds; the laying of

rails; and innumerable scenes taken along many of the railroad systems of all countries.

A few films listed under "Sports and athletics" are: Cross-country running on snow shoes; exciting steeple chase; hockey match on the ice, Montreal; hunting big game in Africa; in the jungle, and native sports; Indians at work and play, Carlisle; long distance horse race, Stockholm, Sweden; pole jumping by the Borneo natives; ski jumping, Norway; surf-board riders, Waikiki, Hawaii; Swedish army gymnastics; tobogganing, Montreal, Canada; water sports, Lakat Datie, Borneo.

"Surgery" comprises operations of various kinds. Dr. Doyen, of Paris, heads the list with operations on tumors, diseases of the nervous system, and general surgery. Several attempts have been made by surgeons in New York along similar lines, but no concerted action has been taken to give to the profession the results obtained. The catalogues and lists published by Charles Urban, London; Gaumont Co., Paris and New York; and the Eclair Co., Paris and New York, contain many films suitable for medical schools.

The following is a sample program given in New York City and repeated to capacity houses on several occasions.

No. 1. Geography: The banks of the Ganges for many miles, showing the massive stone buildings and temples, the burning Ghats, and the cremation of the dead; showing the peasant life in Russia; a band of Cossacks on the march.

No. 2. Agriculture: A model farm in Argentina; the methods of farming; judging prize horses, cattle, etc.

No. 3. Ornithology: Eider ducks; royal swans; sea gulls; pelicans, snipe, and avocets; methods of feeding; their nests and young birds.

No. 4. Natural history: Feeding caterpillars; weaving cocoons; the moth emerging; development of its wings until ready for flight; an otter diving under the water, seizing a fish, and devouring it.

No. 5. Pisciculture: Method of procuring eggs from fish; placing them in the hatching troughs; hatching the eggs; the young fish; method of shipping eggs and fish.

No. 6. Literature: Part of the story of Hiawatha, carefully and correctly arranged and acted at and near the Falls of Minnehaha.

No. 7. Chemistry: The action of acids upon aluminum, magnesium, and other minerals.

No. 8. Botany: The gradual growth of a snowdrop from the time it first peeps from the ground until the buds open.

No. 9. Embryology: The first sign of life in the egg; the gradual development of the embryo until the chick breaks through the shell and finds himself in a new world.

No. 10. Physical culture: Drilling of the boys at Reedham Orphan Asylum, London, England.

This program would prove interesting to audiences everywhere. The exhibition lasts about two hours.

OBSTACLES TO THE USE OF FILMS IN SCHOOLS.

After enumerating such a list of subjects available for use in teaching circles, the question may very naturally arise in the mind of the reader: If there are good educational films on the market, and so many teachers, educators, lecturers, etc., who need them in their everyday work, why do they not use them?

In enumerating the difficulties it may be said that some of these films were made for commercial purposes, pure and simple. All through the films the makers' names appear, and in many films love stories are interjected to meet the tastes of the audiences of the small theaters. These films go the rounds of the shows and are then withdrawn and placed on the shelves of the manufacturers. Many of them could be used in the classroom, provided the names of the manufacturers and similar advertising matter interlarded throughout the films were eliminated.

Another drawback is the slow financial return to be made by the handling of educational films, in consequence of which the business is neglected. The number in this country is not sufficient, and when these are asked for at the exchanges or centers of distribution the films needed are almost invariably somewhere else, and the teacher who wishes to illustrate some special theme on a certain day learns that he must wait a week, two weeks, or even a month. Becoming disheartened, he abandons his project. If the teacher wishes to purchase the special film or films, he is told he must wait until they are obtained from England or France, and again the delays of the boats and the customs make it almost impossible to secure the subjects for at least a month. This makes it very difficult for him to arrange his class curriculum.

Again, it may be that, having secured a few films and used them to advantage, he needs to exemplify more fully the special study. Going to the usual trade channels, he is confronted with the fact that there are no such other films. To make the subjects he needs may cost the manufacturer from $500 up. Who is to pay for this, the teacher or the manufacturer? The teacher can not afford it; the manufacturer will not. What is the teacher to do? He must make these films himself or go without them.

Another obstacle to the use of films in schools is in the city ordinances and State laws, which restrict the operation of projecting machines. In New York City an operator must obtain a license from the board of water supply, gas, and electricity, and similar licenses are required in many other States. There is often difficulty, too, in providing the machine house, or booth, required by the board of fire underwriters. If a school wishes to give an entertainment, a

license has to be obtained; an inspector from the license bureau must examine the electrical fittings, a booth must be erected, either of asbestos, brick, concrete, or iron, fireproof and nearly air proof—a death trap for the man who operates the machine. Then the fire insurance people increase the insurance rate by 50, 100, 150 per cent, because, they claim, that there is great danger from fire. But the danger is so infinitesimal that it seems absurd to saddle the industry with such restrictions. In the 1912 report of the fire marshal for the State of New York 8,165 fires were reported, of which only 9 were said to have been caused by moving-picture machines. Every reputable machine to-day is made fireproof. Either the Power Cameragraph, the Edison Kinetoscope, the Motiograph, or the Simplex could be used in the midst of the audience with perfect safety.

These are a few of the obstacles, none of them insurmountable, and concerted action would probably eliminate them.

HOMEMADE FILMS ARE ENTIRELY PRACTICABLE.

The time is rapidly approaching when every university will be fully equipped with cameras, perforators, printers, and all the appliances necessary to make their own negative and positive films. Several kinds of small cameras suitable for this work are already procurable, and if it is desired to go into more elaborate work, many good makes of professional cameras are at the disposal of the experimenter. Many institutions of learning have photographers and slide makers who could easily learn to operate a motion-picture camera.

These negatives should be available for purchase by some firm making a specialty of educational films, or they should be loaned, on an interchangeable system, from university to university. To illustrate: Suppose Prof. A, of Illinois University, has a series of negatives on physics, while Prof. B, of New York University, has a series of negatives on microscopic subjects, bacteria, etc. Illinois wants microscopic negatives, and New York wants physics negatives. An interchange may be easily made.

In practically every university and college there is an electrical department, and laboratory assistants and students can easily qualify to operate a machine. In high and grammar schools the engineer or his assistant would be the one to do this work.

SOME OF THE ADVOCATES OF MOTION PICTURES.

At the present time a combination of earnest men is in course of formation to bring together the various films already made and to add to them, from time to time, such subjects as may be required. In foreign countries the films are used in the Universities of Berlin and Heidelberg, and in the medical and surgical schools of Vienna. In

France, Paris and Lyon are the centers; in England: Kings College, London, Cambridge, Oxford, Birmingham, Leeds, and Manchester; in Scotland: Edinburgh, Glasgow, and Aberdeen. In Sweden, Stockholm seems to be the only city in which educational films are extensively used.

Great credit must be given to Dean Reber, of Wisconsin University, for organizing an educational film service in that State. Wisconsin, so far as can be learned, is the first State to attempt a systematic use of these educational films for instruction in the schools. Dr. Reber has organized districts, mapped out the curricula, and is, this season of 1913–14, sending to each district, town, or city a series of films in circulating-library fashion. This experiment will be watched with great interest, and if the supply of films can be made to meet the demand, it is probable that other States will follow the lead of Wisconsin.

The State of Minnesota has also found help in the use of Cinematography. The College of Agriculture has made films, not only for its own use, but has supplied the trade and other colleges with films on this subject. A course of lectures is given in the schools of town and country for the benefit of farmers.

Another active movement of education is that of The American Safety League, having main offices at Los Angeles, Cal., and Newark, N. J., and branch leagues in Portland, Me., Seattle, Spokane, San Francisco, and San Diego. Lecturers visit the schools and instruct children how to avoid accidents from automobiles, railway and street cars, using lantern slides and motion pictures for illustration.

Special films have been prepared for the use of social service workers, the societies for the prevention of tuberculosis, hygienic and fresh-air workers, and the temperance movement. One use of the pictures is thus explained in a paper augmented with moving pictures, by Dr. Walter W. Roach, of Philadelphia, supervisor of medical inspectors for the department of health and the board of public education:

> The effect of fresh air is to create a desire for exercise—a natural physiological demand for increased circulation. To meet this need we provide a series of short physical exercises at frequent intervals between lesson periods, designed to promote normal chest expansion and deep breathing; never prolonged, however, to produce fatigue, nor violent enough at any one time to excite perspiration.
>
> For the purpose of illustrating a paper read by the writer at the Fourth International Congress of School Hygiene, at Buffalo, in August, 1913, permission was secured from the parents, and through the courtesy of the school authorities we took a motion picture of the Bache School children at class. This moving picture shows actual schoolroom conditions and the exercises. Such can be copied and taught by any teacher, once they are fixed in the mind. It is an educational film, produced for the good it may do, and is at the disposal of any committee seriously engaged in an effort to secure an open-air class for children who need such schooling.

Almost any manager of a motion picture house will accommodate such a committee by running the reel in private to explain the idea to school board members or parents. This requires only about 10 minutes, as the exercises are abbreviated to show the principles involved for a definite end. The other requirements are transportation charges, prompt and safe return of the film, with a proportionate cost of the wear and tear to replace it, for it is calculated that the celluloid film has a limited life based upon the number of times it is used for exhibition purposes.

MOTION PICTURES IN COLOR.

All the foregoing remarks refer only to black-and-white photography. This paper would not be complete without special mention of cinematography in colors. Many attempts have been made to take photographs in the colors of nature. Dr. Joly, of Dublin, Frederick E. Ives, of New York, Messrs. Lumiere, of Paris, Sanger-Shepard, of London, and others, have made successful pictures of still life and have tried to solve the motion picture in colors. It was left to Messrs. Charles Urban and G. Albert Smith, of London, to bring this problem to a fairly satisfactory solution.

"Kinemacolor," as the process is called, requires specially sensitized film, and the pictures can be made only where there is strong sunlight. Therefore, it is available only during certain months of the year, except where there is brilliant sunshine all the year around, as in the Southwest.

Kinemacolor is particularly useful for showing chemical experiments, inasmuch as the various changes are reproduced in color. There are few branches of the curricula of the schools in which this process can not be used to advantage. If the history courses are illustrated by pictures staged carefully, with due regard to costumes and manners of the period, the lessons taught will be of great benefit. Geography of any particular country can be readily shown, bringing the natural colors before the eyes of the pupils in a manner not possible with the black-and-white pictures. In all departments of natural science the value of this process is apparent.

Many notable scenes and ceremonies of great historical value have been recorded by kinemacolor. Among them are the coronation ceremonies and procession in England, the investure of the Prince of Wales, the Durbar, the Panama Canal, and the inauguration of President Wilson.

Still another process of cinematography in colors is that of the Gaumont Co., of Paris. Their process differs from that of the kinemacolor in that it uses the three primary colors, while kinemacolor uses only two, one primary and one secondary (red and green). Some very beautiful experiments show flowers, fruit, and scenes in rural life.

Both these processes require stronger projecting machines, more powerful arcs, and motors to drive the machine. Kinemacolor

doubles the rapidity of projection of black-and-white subjects, while the Gaumont process requires two and one-half times the speed. Ordinary projection requires approximately 15 to 25 amperes of electric current to illuminate the film, which moves at the rate of 16 pictures per second. Kinemacolor requires 50 to 60 amperes for illumination, and the film moves at the rate of 32 pictures per second, while the Gaumont process needs from 60 to 80 amperes to illuminate, and should have a rapidity of 40 pictures per second.

Comparing the two processes, black and white with the color, the question may arise: If these color pictures are so much superior, why use the plain film at all? The reason is obvious. Ordinary films range in length, according to scene and subject, from 50 to 1,000 feet. To photograph the same subjects kinemacolor requires from 100 to 2,000 feet and Gaumont 125 to 2,500 feet. From the force of necessity the cost of material doubles and trebles. Cameras and projecting apparatus cost more, and much more expert operators are required, both to take and to project the pictures.

CONCLUSION.

The foregoing article is sufficient to show at once the wide field and the deep significance of educational cinematography. In almost every subject in the curricula of schools, colleges, and universities, the cinematograph has already lent valuable aid. Within the next decade the moving pictures will be the indispensable adjunct of every teacher and educational lecturer. On the public platform the cinematograph will inevitably have its recognized place, and it may even invade the pulpit. As the attention and interest of educators are more and more drawn to its merits, the future usefulness of the educational cinematograph bids fair to surpass the predictions of its most sanguine advocates.

CHAPTER XXVIII.

SCHOOLS CONDUCTED BY THE UNITED STATES GOVERNMENT.

CONTENTS.—The educational systems of the American Army—Educational agencies of the United States Navy—Indian education during the fiscal year 1913—Education of natives of Alaska.

THE EDUCATIONAL SYSTEMS OF THE AMERICAN ARMY.

By DOUGLAS MACARTHUR, Captain, General Staff.

Approved by order of the Secretary of War, by Leonard Wood, Major General, Chief of Staff.

NECESSITY FOR THOROUGH PROFESSIONAL TRAINING.

No country in the world has as complete a system of professional scholastic training for its officers as the United States. This is due to the inherent difference between the military establishments of foreign nations and that of our own. Their armies are at all times kept upon a war footing, as a result of which they have ample opportunity for the perfect training of the personnel in the practical duties of the military profession—a result easily obtained where service is always with large bodies of troops. In such an army, the main object is to train every man for the efficient performance of his duties in the grade which he holds when war comes. A lieutenant does not dream of becoming a captain merely as the result of war except as a vacancy is made for him in the casualties of battle. Only in the same way does a captain expect to become a colonel; nor would the idea be tolerated that great numbers of trained line officers are to be suddenly transferred to various staff positions. Their organizations are founded upon the theory that there is nothing recondite in the art of war; that technical and scientific training is needed by only a small portion of military officers; that certain things which a Napoleon must know, every officer must know, and can as readily acquire as he; while those things which differentiate a Napoleon from other generals can not be acquired in any school, not even in that of war.

Such a system assumes that if the military machine is perfect, and every man is fitted for his place and when war comes is in that place, a lesser genius than Napoleon can accomplish sufficient things at its

head; that such an army by its very perfection as a machine will supply the advantage of genius to mediocrity. Such a conception is sound when it thoroughly fits the local theory of military organization. It would be thoroughly unsound if transplanted to the American Army, the organization of which is quite different from continental armies. In fact, the most striking feature in our service is the absence of what constitutes the very essence of the foreign establishments; that is, a great standing army serving in corps, divisions, and brigades, in which the average officer of any grade learns the details of his profession by practical work and with the minimum of theory.

Wars, however, must be fought with large armies; so that our small regular establishment must be merely the leaven for the large improvised armies suddenly called into being. Our system of military education must therefore differ from that of the other great nations of the world in that we can not be content merely with training a lieutenant to be a good lieutenant or a captain to be a good captain, or in training staff officers to the efficient performance of duties in peace which they will continue to perform in the same grade in time of war. But the system must be such as to educate our officers so that they will be able at a moment's notice, when the war expansion comes, to perform the duties of far-advanced grades and to render service in branches of the Army, both line and staff, in which they are not commissioned in time of peace. For this reason we have established a progressive system of schools designed to teach officers and men, limited only by their individual capacities for its assimilation, the duty of the man-in-arms in all grades from lowest to highest.

The military educational system of the United States comprises:

1. The Military Academy at West Point for the education of cadets.
2. Post schools for the instruction of enlisted men.
3. Garrison schools for the instruction of officers in subjects pertaining to the performance of their ordinary duties.
4. The Army Service Schools at Fort Leavenworth, Kans:
   - (*a*) The Army School of the Line.
   - (*b*) The Army Staff College.
   - (*c*) The Army Signal School.
   - (*d*) The Army Field Engineer School.
   - (*e*) The Army Field Service and Correspondence School for Medical Officers.
5. The Special Service Schools:
   - (*a*) The Engineer School, Washington Barracks, D. C.
   - (*b*) The Coast Artillery School, Fort Monroe, Va.
   - (*c*) The Mounted Service School, Fort Riley, Kans.
   - (*d*) The Army Medical School, Washington, D. C.
   - (*e*) The School of Fire for Field Artillery, Fort Sill, Okla.

(*f*) The School of Musketry, Fort Sill, Okla.
(*g*) The Signal Corps Aviation School, San Diego, Cal.
(*h*) The Schools for Bakers and Cooks, Washington Barracks, D. C., and Presidio of San Francisco, Cal.
(*i*) The Training School for Saddlers and for Battery Mechanics of Field Artillery, Rock Island Arsenal, Ill.
(*j*) The School of Instruction for Enlisted Men of the Regular Army selected for detail for duty with the Organized Militia.
(*k*) The Engineer Trade Schools.

6. The Army War College, Washington, D. C.
7. The Schools of Instruction for College Students.
8. The military departments of civil institutions at which officers of the Army are detailed under the provisions of law.

Each of these schools is briefly described hereafter. More complete expositions of their organization, purpose, and curriculum may be found in the Regulations of the various institutions, which can be obtained upon application to the War Department.

THE UNITED STATES MILITARY ACADEMY.

The United States Military Academy is a school for the practical and theoretical training of cadets for the military service. Upon completing its course satisfactorily, cadets are eligible for promotion and commission as second lieutenants in any arm or corps of the Army, the duties of which they have been judged competent to perform. The supervision and charge of the academy are in the War Department under the Chief of Staff.

The earliest proposal for a military school for the United States was that of Brig. Gen. Henry Knox, Chief of Artillery, in May, 1776. His plans were seconded by Col. Alexander Hamilton, approved by Gen. Washington, and consummated by an act of Congress under date of March 16, 1802, authorizing the President to organize and establish a Corps of Engineers to consist of five officers and ten cadets, constituting a Military Academy, to be stationed at West Point. The academy was formally opened July 4. In 1812 a more adequate corps of professors was authorized, a maximum of 250 cadets fixed, and age and mental requisites for admission prescribed. The provisions of this reorganization have furnished the general principles upon which the Military Academy has since been conducted and controlled.

The corps of cadets as now constituted consists of 1 from each congressional district, 1 from each Territory, 2 from the District of Columbia, 1 from Porto Rico, 2 from each State at large, and 40 from the United States at large. Appointment from a congressional district is made upon the recommendation of the Representative

in Congress from that district; from a State at large upon the recommendations of the Senators of the State, and from the United States at large by the President. Those cadets appointed from States or Territories must be actual residents of the congressional or territorial districts, or of the District of Columbia, or of the States, respectively, from which they are appointed. The maximum number of cadets is 580. The total number of graduates from 1802 to 1913, inclusive, is 5,205.

Candidates for admission are required to pass a physical and mental examination. They may be excused from the latter if the candidate is accredited to or a properly enrolled student in good standing of a university, college, or technological school, of the same general rating as regards curriculum as Harvard, Yale, Cornell, etc., provided he has established proficiency in mathematics A_1 (algebra to quadratics), A_2 (algebra, quadratics, and beyond), and C (plane geometry), and English A (reading and practice) and B (study and practice), as outlined by the College Entrance Examination Board; or if the candidate presents a properly attested certificate from the College Entrance Examination Board that he has passed 14 units of its examinations, including mathematics A_1, A_2, and C, English A and B, and history A (ancient history), and D (American history and civil government).

The general physical requirements are as follows:

No candidate shall be admitted who is under 17 or over 22 years of age, or less than 5 feet 4 inches in height at the age of 17, or 5 feet 5 inches in height at the age of 18 and upward, or who is deformed or afflicted with any disease or infirmity which would render him unfit for the military service, or who has, at the time of presenting himself, any disorder of an infectious or immoral character. Candidates must be unmarried.

The mental examination is in the following subjects: Algebra, plane geometry, English grammar, English composition, English literature, geography, United States history, general history.

The course of instruction covers four years, the scope and details of the work of each department being as follows:

DEPARTMENT OF TACTICS.

All classes.

New cadets upon reporting for duty are given infantry recruit instruction, with gymnastic and calisthenic exercises, until they join the battalion.

Practical instruction is given during the summer encampment, and from September 1 to November 1 and from March 15 to June 1 in cavalry, artillery, and infantry drill regulations, in target practice with the rifle, revolver, mountain gun and field gun, and in military engineering. During the summer encampment, cadets of the third and fourth classes are also taught swimming and dancing, and those of the first class the service of seacoast artillery and submarine defense at Fort Wright, N. Y.; all classes

participate in exercises in minor tactics, practice marches, problems, and practical fieldwork, in which the employment of all arms is exemplified.

Practical instruction in fencing and gymnastic exercises and in boxing and wrestling is given to the fourth class from October 1 to June 1 and to the other classes from November 1 to March 15.

Instruction in riding is given to the first class during the encampment and from September 1 to June 1, excepting the month of February; to the second class, from November 1 to March 31; and to the third class from November 1 to March 15 and during the summer encampment. Instruction with English pad saddles is given to the first class and in polo to the first and second classes.

During the winter months map problems for the purpose of instruction in writing orders, selecting positions from the map, both offensive and defensive, making dispositions of small forces, selecting best route for advance and retreat, and for practice of map reading in general; also lectures upon the methods pursued in company, post, and staff administration, upon uniforms and equipments, and upon etiquette and customs of the service are given cadets of the first class.

DEPARTMENT OF CIVIL AND MILITARY ENGINEERING.

First class.

The course in civil and military engineering and the art of war is confined to the first-class year.

The course in civil engineering begins September 1 and is completed during the first term, which closes with the Christmas holidays. It comprises brief treatises on the mechanics of civil engineering, framed and masonry structures, the materials of engineering, water supply, and sewerage.

The course in military engineering and the art of war begins on January 2 and closes on the 3d of June. Military engineering embraces the study of field and permanent fortifications and siege works. The art of war embraces the study of the organization of armies, employment of the different arms in combination, logistics, and strategy. To familiarize the students with its principles, lectures are delivered on military subjects, and the principal operations of about 20 selected campaigns are studied. During this course the students are taken to the battlefield of Gettysburg to familiarize them with the effects of topography on the employment of troops in the field.

DEPARTMENT OF NATURAL AND EXPERIMENTAL PHILOSOPHY.

Second class.

The course in natural and experimental philosophy begins with and continues throughout the third academic year. Mechanics is studied during the first term. The course aims to be as complete as possible, with the limitation that it can be properly covered in a term of about 90 to 100 days by students having a proficient knowledge of the calculus; the treatment is sufficiently mathematical to furnish a confident basis for advanced work in the technical staff after graduation. The second term is devoted to the subjects of sound and light, and astronomy.

DEPARTMENT OF MATHEMATICS.

Third and fourth classes.

The course in mathematics begins with the fourth-class year and continues through the third-class year. In the fourth-class year algebra is completed in alternation; first with geometry, then with trigonometry. Plane analytical geometry is begun. In the third-class year plane and solid analytical geometry and descriptive geometry are completed in alternation. The calculus and least squares finish the course.

The course in algebra covers the entire subject as generally taught in colleges, but the student is expected to have already mastered elementary algebra to include the progressions and the solution of the quadratic equation. The course in elementary geometry includes the books that relate to the plane and those that relate to space, but the student is expected to have mastered the former. Plane and spherical trigonometry includes the complete solution of the plane and spherical triangles. The course in analytical geometry includes the discussion of the general equation of the second degree in the plane and the particular forms of the equation of the second degree in space. Descriptive geometry includes, in orthographic projections, the right line, the plane, ruled surfaces and surfaces of revolution, tangent planes, and intersections of surfaces. It also covers shades and shadows, perspective, isometric projections, and spherical projections. The course in differential and integral calculus covers the ground of the usual college textbook, including briefly the subject of ordinary differential equations.

DEPARTMENT OF CHEMISTRY, MINERALOGY, AND GEOLOGY.

Third and second classes.

This department embraces two branches of physics not included in its title, namely, heat and electricity.

The course begins March 1 of the second academic year and extends to March 1 of the third academic year; exercises, recitations, laboratory work, or lectures take place on all week days.

Commencing March 1 general chemistry, supplemented by a few lessons in heat, occupy the time until the close of the term in June.

Beginning September 1 the daily exercises alternate between heat and mineralogy until these subjects are completed, then the daily exercises alternate between geology and electricity, the geology being completed by the close of the term, December 23. Beginning January 1 the remainder of the course in electricity is completed by the end of February.

DEPARTMENT OF DRAWING.

Third and second classes.

The course in drawing extends through the third and second class years, attendance on alternate afternoons for a period of two hours during the full academic year. The order of instruction is as follows:

Third class year:

(1) Elementary freehand perspective drawing from blocks and objects.
(2) Use of drawing instruments.
(3) Problems in plane geometry.
(4) Problems in descriptive geometry.
(5) Lettering. Exercises in this subject continue throughout the course.
(6) Elementary problems in third angle projection.
(7) Building construction drawing.

Second class year:

(1) Freehand mechanical, perspective, and memory drawing.
(2) Isometric projection of framed structure.
(3) Machine drawing, third angle projection.
(4) Assembly and working drawings from models.
(5) Topographical sketching and drawing.

Instruction is mainly through a loose-leaf system of printed instruction sheets covering the various drawings and phases of the work. These are supplemented by short section-room lectures and blackboard illustrations when necessary.

DEPARTMENT OF MODERN LANGUAGES.

Third, second, and first classes.

The course in modern languages comprises instruction in French and in Spanish.

DEPARTMENT OF PRACTICAL MILITARY ENGINEERING.

Fourth, third, second, and first classes.

Cadets of the fourth class receive an elementary course in theoretical surveying between March 15 and May 15.

During the summer encampment cadets of the third class receive practical instruction in the use and adjustment of surveying instruments and in surveying methods. In this course they apply in the field what has been taught them in their theoretical course of the preceding spring.

Cadets of the second class receive, during the fall drill season, instruction in visual signaling, using the flag and the heliograph for sending and receiving messages. They are also taught to set up and adjust the heliograph and the acetylene lantern. During the spring period this class is instructed in the field methods of electrical communication and is given practice in establishing and using buzzer lines under, as nearly as possible, service conditions. The course also comprises setting up and operating field wireless telegraph outfits. During the summer encampment cadets of the first class are instructed in building pile, trestle, and pontoon bridges, in improvising methods of crossing streams, in making road sketches, both mounted and dismounted, and in combined position sketching. During the fall course this class is given instruction in the construction and operation of appliances used in field engineering, in the erection of spar and trestle bridges, and in the use of explosives in military demolitions. The spring course is devoted to field fortification work, including the construction of trenches, revetments, obstacles, bombproofs, and gun pits; posting and distribution of working parties in the construction of saps, trenches, parallels, and approaches; and tracing and profiling siege works.

DEPARTMENT OF ORDNANCE AND GUNNERY.

First class.

The subject of ordnance and gunnery is studied by the cadets of the first class throughout the academic year. The course of instruction covers the principles involved in the construction and use of war material. It is broadly divided into three parts—the theoretical, the descriptive, and the practical. The theoretical part includes the study of the action of explosives, the study of interior and exterior ballistics, the theories of gun and carriage construction, and the principles of gunnery. The descriptive part of the course covers the processes of manufacture of powders, guns, projectiles, and armor; and describes the small-arms cannon, machine and rapid-fire guns in use in the United States service, with the carriages, ammunition, and accessory appliances required for their service. The practical part of the course covers work with ballistic instruments and the operation of machines and appliances used in the fabrication of modern ordnance, the latter work being in effect a short but valuable course in manual training. In connection with the course, visits are made to Watervliet Arsenal, where the processes of gun construction are observed, and to the Ordnance Proving Ground at Sandy Hook, where actual firings from the several classes of guns are observed, including usually one or more shots against armor, and where the latest developments in war material are seen.

DEPARTMENT OF MILITARY HYGIENE.

Third class.

The course in military hygiene begins September 1. It consists of 6 lectures and 13 recitations. The course covers the essential points in the care of troops, particular attention being paid to the following:

Personal hygiene; exercise and physical training; the selection of recruits; preventable diseases; clothing and equipment; the water supply; foods and their preparation; the disposal of wastes; the sanitation of posts and barracks; the sanitation of camps, marches, and battlefields; the hygiene of hot and of cold climates; the sanitary duties of line officers; venereal diseases; the nature and effects of alcohol and other narcotics. During the summer camp the first class is instructed in the use of the first-aid packet and the treatment of surgical emergencies. On marches, at the end of each day, the medical officer discusses practical matters from the point of view of the military sanitarian.

DEPARTMENT OF ENGLISH AND HISTORY.

Fourth class.

The course in English and history begins with the fourth class in September and continues throughout the academic year. In English the curse of instruction is planned to inculcate the essential principles of rhetoric, both by study of the textbook and by frequent practice in the various forms of composition including practice in personal and official correspondence, to create an intelligent appreciation of the best in English literature by the study of selected literary masterpieces, to impart a knowledge of the important facts in the history of English literature and language by the study of a textbook and lectures. In history the course of instruction is planned to acquaint the student with the political, social, and economic history from the end of the middle ages to the present day, to make him familiar with the fundamental principles of civil government, with special reference to the United States, and to give him knowledge of various typical forms of modern national and municipal governments.

POST SCHOOLS.

A school for the instruction of enlisted men in the common branches of education, and especially in the history of the United States, is maintained at each post. Instruction is given under the supervision of officers by teachers detailed from the enlisted men. Attendance on the part of the men is not obligatory. Schools for the instruction in military subjects of noncommissioned officers and specially selected privates are maintained in each company. Instruction is conducted by the company commander or by an officer of the company under his supervision and consists of recitations, lectures, discussions, and practical exercises. The course of instruction includes Drill Regulations, Army Regulations relating to enlisted men, Minor Tactics, and subjects which specially pertain to the duties of noncommissioned officers and enlisted specialists of the arm of the service to which they belong. When practicable, elementary instruction in the Spanish language is given. Certificates of proficiency are furnished noncommissioned officers and others who have satisfactorily completed the course of instruction in any subject.

GARRISON SCHOOLS.

Garrison schools for officers are maintained at all military posts, and instruction therein is conducted under the personal supervision of the post commander. The instructors are selected from officers on duty at the post. The period of instruction extends from November 1 to March 30, inclusive. The attendance is daily, except Saturdays, Sundays, and holidays. The instruction covers at least one hour of each school day and consists of conferences and the practical application of theoretical principles in lieu of or combined with the ordinary recitation method. All lieutenants and, under certain conditions, captains are required, with a few minor exceptions, to take the entire garrison school course for their respective arms of the service. During the first year of their commissioned service and before entering upon the course at the garrison school, officers of all branches, except the Corps of Engineers, are required to pursue a preliminary course of instruction. The regular course covers three years, the subjects in each year being as follows:

First year: (1) Field Service Regulations; (2) Administration; (3) Drill Regulations; (4) Small Arms Firing Manual.

Second year: (1) Tactics; (2) Military law; (3) International law.

Third year: (1) Military field engineering; (2) Military hygiene; (3) Hippology; (4) Military topography.

Officers who are declared proficient upon examination in any subject receive certificates to that effect. In addition to the regular course, postgraduate work is conducted at all military posts under the immediate direction of the post commander, and consists of—

(*a*) Tactical problems on the map, including map problems, map maneuvers, and the war game.

(*b*) Terrain exercises, including tactical walks and staff or tactical rides.

(*c*) Special studies by selected officers of important subjects bearing upon the military service.

All officers of the line of the Army below the grade of colonel, not actually engaged as instructors or student officers in the garrison school course, will participate in the postgraduate work. Officers of the Organized Militia are permitted to attend garrison schools under the following conditions:

They must be recommended to the Secretary of War by the governor of the State; they must be citizens of the United States, not less than 21 nor more than 35 years of age, and not above the grade of colonel; must have been members of the Organized Militia at least one year prior to making application; must be of sound health and of good moral character; and must have such educational qualifications as will enable them to participate profitably in the course of instruction.

THE ARMY SERVICE SCHOOLS.

The group of schools known as the Army Service Schools has been established at Fort Leavenworth, Kans. It consists of the Army School of the Line as the basic school, with the Army Staff College, the Army Signal School, the Army Field Engineering School, and the Army Field Service and Correspondence School for Medical Officers as specially affiliated schools. Their general object is the better preparation of the mobile army for war. The commandant of the Army service schools is an officer of grade not lower than that of brigadier general, especially selected for the duty by the War Department. The assistant commandant is the senior line officer of the staff of the schools on duty thereat and is charged with the immediate administration of the schools. Ordinarily the course in each of these schools is of one year's length. Officers of the Organized Militia are permitted to attend under general requirements similar to those for admission to garrison schools.

The Army School of the Line.—The object of the Army School of the Line is the instruction of specially selected officers from the line of the Army in the proper methods to be employed in the leading and care of troops in time of war and their training in time of peace. The assistant commandant of the Army service schools is the director of the Army School of the Line. The student body consists of one officer from each regiment of Cavalry, Field Artillery, and Infantry, of grade not lower than that of captain and of not less than 5 years' commissioned service, together with such other officers as may be specially designated.

Course of Study.

The course of study is embraced in three departments, as follows:

I. The department of military art.
II. The department of military engineering.
III. The department of military law.

I. Military Art.

The course comprises the following subjects or fields of inquiry:

(*a*) Troops in campaign.—Organization, field orders, marches, camps, supply, and the care of troops in the field. Instruction in sanitation and the care of troops to be given by the Army Field Service and Correspondence School for Medical Officers. Instruction by conferences, lectures, and practical problems.

(*b*) Tactics.—Of the single arm and of the arms combined. Instruction by conferences, lectures, demonstrations, and practical work in map problems, terrain exercises, tactical rides, and maneuvers on the map and in the field.

(*c*) Weapons and munitions of war.—Instruction by conferences, lectures, and practical demonstrations relating to modern military weapons and munitions and their employment in war.

(*d*) Military history.—Instruction by conferences and lectures.

(*e*) Hippology and equitation.—Instruction by lectures, discussions, and practical demonstrations.

(*f*) Lectures and discussions on questions of current military interest.
(*g*) Conduct of war.—Instruction by conferences and practical problems.

II. Military Engineering.

Instruction in military engineering is given by the Army Field Engineer School. The course comprises theoretical and practical work in the following subjects:

(*a*) Military topography, map reading.—The principles and practice involved in the use of all classes of maps for military purposes. Instruction by conferences and practical examinations, and by studies of terrain, assisted by the staff class.

(*b*) Military topography, surveying.—The principles and practice involved in the making of topographical surveys, with special reference to subsequent instruction in sketching. Instruction by conferences, field practice under the staff class as instructors, and field problems.

(*c*) Military topography, sketching.—The principles and practice involved in the rapid making of individual road, outpost, position, and place sketches, and their combination and reproduction. Instruction by lectures, conferences, field practice under the staff class as instructors, and field problems.

(*d*) Field engineering.—The making and handling of engineering devices to facilitate or hinder the operations of troops in the field. Instruction by conferences, lectures, and demonstrations.

(*e*) Field fortification.—The theory and application of the principles of field fortification with special reference to its relations to tactics. Instruction by conferences, lectures, and the solution and discussion of field and map problems involving the location and preparation of defensive positions.

III. Military Law.

The course comprises the following subjects, instruction by conferences, lectures, and study of cases:

(*a*) Elements of law.—Law in general and the relation of military and martial law thereto.

(*b*) Criminal law.—With special reference to military tribunals.

(*c*) Law of evidence.—With special reference to military tribunals.

(*d*) Practical exercises.—Applying the principles of law to the procedure of military tribunals and to military administration generally.

Proficiency and class standing of student officers are determined by examination in theoretical and test in practical work.

The Army Staff College.—The object of the Army Staff College is to train the selected graduates of the Army School of the Line for the more important staff duties with large commands in time of war.

The assistant commandant of the Army service schools is the director of the Army Staff College. Selections of student officers are made from the highest graduates of the latest class of the Army School of the Line and the Army Field Engineer School.

Course of Study.

The course of study is embraced in four departments, as follows:

I. The department of military art.
II. The department of military engineering.
III. The department of military law.
IV. The department of languages.

I. Military Art.

The course comprises the following subjects or fields of inquiry:

(*a*) Staff duties.—To include duties of the General Staff, supply, and administration. Instruction by lectures and conferences and practical problems.

(*b*) Tactics.—(1) Instruction by lectures and conferences. (2) Map problems and terrain exercises, tactical and staff rides, and maneuvers on the map and ground. (3) Practice in criticizing and umpiring practical exercises in the Army School of the Line and the Army Field Engineer School. (4) Practical demonstrations of the uses of all means afforded by the Signal Corps for gaining information and furnishing lines of information in the theater of operations, including balloons, wireless and ordinary telegraph, telephones, etc., in conjunction with field exercises.

(*c*) Military history.—Instruction by lectures and conferences, and if practicable, by an historical ride.

(*d*) Strategical and tactical cooperation of the Army and Navy.—Lectures on modern navies and naval warfare, with special reference to cooperation with an army. These lectures will be given, when practicable, by an officer of the United States Navy.

(*e*) Care of troops.—Instruction in the care of troops is given by the Army Field Service and Correspondence School for Medical Officers.

II. Military Engineering.

Instruction in military engineering is given by the Army Field Engineer School. The course comprises practical work in the following subjects:

(*a*) Military topography, sketching.—The making of rapid individual, road, position, outpost, and place sketches; combined road and position sketches; the organization and direction of sketching and surveying parties covering large areas, and the methods of combining the resulting sketches; photographic and mechanical processes for reproduction of maps and drawings; assisting in the instruction of the Army School of the Line in the practical work in military topography. Instruction by lectures, demonstrations, and field problems.

(*b*) Fortification.—The principles and application of field, provisional, and permanent fortifications and the attack and defense of fortified places. Instruction by lectures and by field and map problems in the location and preparation of defensive positions and in fortress warfare.

III. Military Law.

The course comprises the following subjects, instruction to be given by conferences, lectures, study of cases, and original research:

Military government and martial law, the laws of war, and the military in aid of the civil authorities.

IV. Languages.

The course of instruction in languages is elective for the student officer and comprises instruction in French, German, Spanish, or any other foreign language in which it may be practicable to give instruction, provided, that no student officer is permitted to elect one of these languages unless he has a satisfactory knowledge of Spanish. The course of each language will comprise instruction in reading, writing, and speaking, with a special view to acquiring a conversational knowledge of the language. Instruction will be given by conferences, lectures, and conversational practice.

The Army Signal School.—The object of the Army Signal School is: (1) To prepare officers of the Signal Corps for the better performance of the duties of their profession, to provide instruction in signal duties for such officers of the line as may be designated therefor, and to make

research and practical experiments in such subjects as relate to the duties of the Signal Corps. (2) To supplement the instruction given in the Army School of the Line and the Army Staff College along the special technical lines of the Signal Corps as called for by the schedules of the latter schools, having especially in view the relation of the Signal Corps to the whole Army and the function it fulfills in time of war.

A field officer of the Signal Corps acts as director of the Army Signal School. Student officers are limited to 15 in number and are selected from the permanent officers of the Signal Corps and from line officers of the rank of captain or first lieutenant.

Course of Study.

The course of study is embraced in three departments, as follows:

I. The department of signal engineering.
II. The department of topography.
III. The department of languages.

I. Signal Engineering.

The study of this subject is divided into two parts, theoretical and practical.

Theoretical instruction is conducted by means of lectures, recitations from the authorized manuals and textbooks, technical conferences, and written problems, and comprises the following subjects or field of inquiry:

(*a*) Fundamental laws of electricity and principles of electrical engineering.
(*b*) Electrical signaling.
(*c*) Visual signaling.
(*d*) Aeronautics.
(*e*) Tactical relations of signal troops.
(*f*) Fire control equipment for artillery.
(*g*) Telegraph lines and submarine cables
(*h*) Gas and oil engines.
(*i*) Photography.
(*j*) Codes and ciphers.

Practical instruction consists of laboratory, photographic, and aeronautical work and exercises in the field. The laboratory course embraces instruction in making fundamental electrical measurements, and in the operation, repair, and maintenance of various instruments and appliances used by the Signal Corps, such as buzzers, telephones, various forms of telegraphs, and wireless apparatus.

In visual signaling, instruction is given in the use of flags, heliographs, acetylene lanterns, rockets and bombs, field glasses and telescopes.

The aeronautical course embraces practical instruction as far as possible in packing, unpacking, and assembling balloons and flying machines, the manufacture and transportation of hydrogen gas, inflation of balloons, operation of motors, and ascensions. Instruction is given in operating gasoline and oil engines.

The practical instruction in photography consists of taking, developing, and printing from negatives under field conditions.

The field exercises embrace the use of the various instruments and appliances used for military signaling in all its branches and in the solution of field problems. Preparatory to the solution of field problems, lectures will be given on divisional tactics, and map problems solved involving the employment of signal troops.

II. Topography.

The course comprises theoretical and practical work in military topographical sketching. Instruction in topography is given by the Army Field Engineer School.

III. Languages.

The course in languages is the same as in the Army Staff College.

The Army Field Engineer School.—The object of the Army Field Engineer School is—

(1) The instruction of officers of the Corps of Engineers and engineer officers of the Organized Militia in their military duties;

(2) To furnish such instruction in military engineering as the schedules of the other schools comprising the Army service schools may call for.

A field officer of the Corps of Engineers acts as director of the Army Field Engineer School. The student officers comprise not less than 2 nor more than 10 officers of the Corps of Engineers of grade not below that of captain.

Course of Study.

The course of study is embraced in two departments, as follows:
I. The department of military engineering.
II. The department of military art.

I. Military Engineering.

The study of this subject is both theoretical and practical. Theoretical instruction is by lectures, conferences upon assigned lessons, and written examinations. Practical instruction is by problems and terrain exercises. The course comprises the following subjects and fields of inquiry:

(*a*) Military map making with special reference to large areas.
(*b*) Organization, duties, and equipment of engineer troops.
(*c*) Field fortification, including mining and demolitions.
(*d*) Engineering works on lines of communication.
(*e*) Castramentation.

II. Military Art.

The study of this subject is identical with the study of the same subject in the Army School of the Line, and will be conducted under the direction of the director of that school.

The Army Field Service and Correspondence School for Medical Officers.—This school consists of two parts: One, the Field Service School for Medical Officers, at which attendance in person for the pursuance of a graded course of study is required; the other, the Correspondence School, wherein answers and solutions to such questions and problems as may be sent to designated medical officers, at their posts or stations, are required. Its object is:

In the Field Service School—

(*a*) To instruct officers of the Medical Corps and medical officers of the Organized Militia in their duties as administrative and staff officers on field service, and to make research into such subjects as may concern medical officers under field conditions.

(*b*) To give such technical instruction to students in the other schools as the schedules of those schools, approved by the commandant, may call for.

In the Correspondence School—

(*c*) To afford opportunity for such wider elementary instruction in the methods and purposes of military plans and movements as will enable medical officers of the Regular Army better to fulfill their duties in the field, and to prepare them to participate to better advantage as students in actual attendance at the Field Service School for Medical Officers.

A field officer of the Medical Corps acts as director of the school. The course is of six weeks' duration and comprises the following subjects:

General sanitary organization and organization of sanitary detachments, units, and formations; sanitary equipment and supply; the transportation of sick and wounded; weapons, ranges, and positions; tactical use of the sanitary service in war; the sanitary service of the line of communications and the base; hospital trains and ships; the use of the Red Cross and other voluntary aid associations.

SPECIAL SERVICE SCHOOLS.

The Engineer School, Washington Barracks, D. C.—The object of the Engineer School is to prepare the junior officers of the Corps of Engineers for the active duties of their arm and corps; to make researches in such branches of science as relate to the duties of the Corps of Engineers; to disseminate information so obtained; and to make such experiments and recommendations and to give such instruction as may be necessary for the civil engineering work of the Army. The school is under the supervision and control of the Chief of Engineers and is administered by a commandant, who is a field officer of engineers.

The course of instruction extends over 18 months and is divided into three departments, as follows: (*a*) Military engineering; (*b*) civil engineering; (*c*) electrical and mechanical engineering.

The subjects in the various courses are as follows:

Department of military engineering:
- Seacoast defenses, including land defense.
- Ordnance, armor, and explosives.
- War ships and sea power.
- Photography and map reproduction.

Department of civil engineering:
- Surveying, geodetic and hydrographic.
- Field astronomy.
- Cements and mortars.
- Concrete and masonry.
- Foundations.
- Roofs and bridges.
- Building construction.
- Heating and ventilation.
- Water supply.
- Sewage disposal.
- River and harbor improvement.
- Light house construction.
- Construction plant.
- Contracts, specifications, estimates, and accounts.

Department of electrical and mechanical engineering:
- Direct-current machinery and storage batteries.
- Alternating-current machinery.
- Electric-power transmission.
- Electric lighting and searchlights.
- Fire-control apparatus.
- Steam-power electric machinery.
- Hydro-electric power machinery.
- Internal-combustion engines.
- Electric-power plant design.

In connection with the prescribed course of instruction in the several departments, visits are made to points where important engineering works are in progress.

The Coast Artillery School, Fort Monroe, Va.—The object of the Coast Artillery School is to enlarge the field of instruction of the garrison schools for coast artillery officers by advanced courses of study and practical training in the technical duties of their profession, and to educate and train specially selected enlisted men for the higher grades in the coast artillery noncommissioned staff. The school is under the supervision and control of the Chief of Coast Artillery and is administered by a Commandant, who is a field officer of Coast Artillery. The school has two divisions, the officers' division and the enlisted men's division.

Officers' division.—This division embraces two departments:

(1) The department of artillery and land defense.

(2) The department of engineering and mine defense.

Two courses of instruction are given in these departments, each course requiring one year to complete:

(*a*) The regular course for about 30 captains and lieutenants detailed by the War Department from the Coast Artillery Corps.

(*b*) The advanced course for about 10 officers selected from the honor and distinguished graduates of the regular course and such others as have shown peculiar fitness for this advanced work. The special object of the advanced course is to qualify instructors for the

school, and to prepare selected officers for duty at the Army War College, and on the General Staff.

The following is an outline of the course of study in the officers' division:

I. Department of Artillery and Land Defense:
  Regular course—
    (1) Coast Artillery material.
    (2) Gunnery.
    (3) Artillery defense.
    (4) Land defense.
  Advanced course—
    (1) Artillery defense, advanced.
    (2) Land defense, advanced.
II. Department of Engineering and Mine Defense:
  Regular course—
    (1) Electrical engineering.
    (2) Mechanical and steam engineering.
    (3) Submarine mining.
    (4) Explosives.
  Advanced course—
    (1) Electrical engineering, advanced.
    (2) Mechanical and steam engineering, advanced.
    (3) Mine defense.
    (4) Explosives, advanced.

Enlisted men's division.—This division has for its object the theoretical and practical instruction of the enlisted personnel who are actually to man the power plants, boilers, and engines, install and maintain the electrical machines, instruments, and searchlights, and prepare the drawings and charts for coast artillery work at the various posts.

In order to be eligible for a course of instruction, an enlisted candidate for master gunner, electrician sergeant, or fireman, must have had at least one and one-half years' continuous service in the Coast Artillery Corps immediately prior to the beginning of the school term; and must be practically familiar with one or more classes of machinery, apparatus, or equipment pertaining to the course selected, and must satisfy his commanding officer of his ability to pursue successfully the course of study prescribed. Those enlisted men successfully completing any course are eligible for appointment to the proper noncommissioned staff of the Coast Artillery Corps, and all who qualify receive such appointments.

The school work of this division comprises three distinct regular courses, each course being completed in one year. The total number of enlisted students is about 50 or 60. The three regular courses pursued are the electrical, the mechanical, and the artillery. In addition to these a special course in radio-telegraphy was established in 1912.

The electrical course is designed to prepare men for appointment as electrician sergeants. This course covers the ordinary technical application of electricity in the coast artillery service, and includes in addition elementary electrical engineering.

The mechanical course is designed to prepare men for appointment as firemen. It includes thorough practical instruction in all the routine duties of the boiler room, the engine room, and the machine shop, and, in addition, gives a practical knowledge of fuels and fuel burning, steam and steam production, boiler and engine tests, and general-power plant operation such as will best prepare students taking the course for the responsible position of engineer.

The artillery course, while intended primarily to fit men for a proper performance of the duties of a master gunner, includes practical and theoretical instruction in mathematics, photography, topography, mechanical drawing, and seacoast engineering.

The work covered in each of these courses is in part theoretical, but is mainly practical, so that a man successfully completing a course can immediately take up at a post the practical work that falls to him.

The Mounted Service School, Fort Riley, Kans.—The object of the Mounted Service School is to give practical instruction in equitation and its kindred subjects. The administration of the school is in the hands of a Commandant, who is a field officer detailed from the mounted branches of the service. The school has four divisions: (a) The School for Field Officers; (b) the School for Company Officers; (c) the School for Farriers and Horseshoers; (d) the School for Bakers and Cooks.

In the School for Field Officers, the course of instruction begins April 1 and ends June 15. The student body consists of not to exceed 21 field officers detailed from the mounted branches of the service. The course has for its aim the instruction of officers in superior horsemanship and in the practice of bold riding. Only such theoretical instruction—including modern breeds, cross breeding, blood lines, and conditioning of horses—is given as will not interfere with that aim or with any other practical work.

In the School for Company Officers the course of instruction begins September 25 and ends June 30. The student body consists of not more than 36 officers of the rank of captain or lieutenant selected from the mounted branches. No officer is detailed who has had less than three years' commissioned service. The course of instruction includes:

(1) Equitation and horse training.—Practical instruction in the training of horses; in the military seat; in advanced equitation; in correction of vices; in jumping; in cross-country work; and in stable management.

(2) Hippology.—Theory of the anatomy and diseases of the horse; tests in determining the age of horses; tests in examining horses for soundness, conformation, and

suitability for service; exercises in diagnosis of diseases, hospital work; attendance at operations and dissections.

(3) Horseshoeing.—Preparing the foot; fitting shoes; normal shoeing; shoeing to correct faults in gaits; pathological shoeing.

(4) Forage.—Tests and inspections.

(5) Harness and transportation.—Taking apart and assembling harness and wagons; harnessing; principles of driving; entraining and detraining animals and wagons.

(6) Pioneer duties, including the use of explosives.

In the School for Farriers and Horseshoers there are annually two courses of four months each, viz, February 15 to June 15, and July 15 to November 15. The classes are composed of specially recommended men detailed from the mounted branches of the service. The students are taught how to treat and care for sick horses, and are instructed in practical horseshoeing. Upon completion of the course, certificates of proficiency are awarded to men who successfully pass a thorough theoretical and practical examination.

The School for Bakers and Cooks is conducted on the same general lines as the similar schools at Washington Barracks and the Presidio of San Francisco.

The Army Medical School, Washington, D. C.—The purpose of the school is to prepare selected medical students for entry into the Medical Corps of the Army. The candidates are appointed to the Medical Reserve Corps, and are sent to the school and given a year's course in the following subjects: Medical Department administration; clinical microscopy and bacteriology; military hygiene; military surgery; military and tropical medicine; sanitary chemistry; ophthalmology and optometry; and radiography. Upon graduation the students who receive diplomas are commissioned as first lieutenants in the Medical Corps of the Army.

The School of Fire for Field Artillery, Fort Sill, Okla.—The object of the school is to give practical instruction in the tactical handling of field artillery. The administration of the school is intrusted to a commandant, who is a field officer of Field Artillery.

The following courses are prescribed:

Course A.—For captains and lieutenants of Field Artillery and such officers of the Infantry and Cavalry as may be ordered to attend by the War Department.

Course B.—For field officers of Field Artillery.

Course C.—For noncommissioned officers of Field Artillery.

Course D.—For officers of the field artillery organizations of the Organized Militia, under regulations prescribed by the Secretary of War.

The subjects in the various courses are as follows:

Course A: Target practice and the tactical use of field artillery, as far as the occupation of position is concerned; study of the organization of the personnel, matériel, and ammunition supply of foreign services in comparison with our own; reconnoissance and panoramic sketching; ammunition supply service; practical ballistics.

Course B: Duties of Artillery commanders; target practice; reconnoissance and occupation of position, in accordance with concrete tactical problems; fire direction for the organization of which their rank gives them command; ammunition supply.

Course C: Setting up and operation of targets; observation of fire; sketching and scouting; range finding, use of instruments, and such other instruction as the commandant may find necessary in individual cases.

Course D: Such parts of courses A and B as may be prescribed by the commandant of the school.

The School of Musketry, Fort Sill, Okla.—The purpose of this school is to teach officers of the mobile Army how to handle the fire of their commands so as to obtain the maximum effect. The methods of instituting a satisfactory system of fire discipline and control are taught, as well as the development of firing tactics for the infantry arm of the service. Original research work and practical application of tactical principles and their coordination are also included. The administration of the school is under the direction of the Commandant of the School of Fire.

The Signal Corps Aviation School, San Diego, Cal.—The object of the school is to train military aviators and to develop by experimental research practical aeronautics as applied to military problems. The administration of the school is intrusted to a Commandant, who is an officer of the Signal Corps. The student body consists of not more than 30 officers detailed from the Army at large. The course of instruction is divided into two parts, the theoretical and the practical. In the theoretical course the following subjects are included:

(*a*) Aeronautical mechanics and aeroplane design.
(*b*) Theory of propellers.
(*c*) Theory and operation of internal-combustion engines.
(*d*) Meteorological physics and laws of atmosphere as applied to aeronautics.
(*e*) Aerial reconnoissance.
(*f*) Aerotelegraphy.

The practical course includes:

(*a*) Training in flying.
(*b*) The care and repair of flying machines.
(*c*) Aerial map making.
(*d*) Aerial transmission of dispatches.

The Schools for Bakers and Cooks.—There are three of these schools: One at Washington Barracks, D. C.; one at the Presidio of San Francisco, Cal.; and one at Fort Riley, Kans. Their object is to give practical instruction in the art of cooking and baking to classes composed of selected enlisted men. The school term is of four months' duration. Upon completion of the school course, certificates of proficiency are awarded to the students who pass a satisfactory examination. Degrees of proficiency will be noted thereon as follows:

Assistant baker—A competent journeyman baker.
Baker—Same as assistant baker and capable of handling a bakery, its working force, and all of its accounts.
Second cook—A competent organization cook.
First cook—Same as second cook and capable of handling a kitchen, its working force, and simple accounts.
Mess sergeant—A first cook who has demonstrated for at least one month his ability to supervise and control all details and accounts of an organization mess.

Training School for Saddlers and Battery Mechanics of Field Artillery, Rock Island Arsenal, Ill.—The purpose of the school is to train practical saddlers and battery mechanics. The school is under the direction of the Chief of Ordnance, and its administration is in the hands of the commanding officer of Rock Island Arsenal. The school term is of 11 months' duration. The classes under instruction are composed of specially recommended enlisted men detailed from the various organizations of the Army. The saddlers' course comprises practical work in all the important departments of the manufacture and repair of harness, bridles, saddles, and other leather equipment pertaining to the mounted service. The mechanics' course includes instruction in riveting, in the use of the file, chisel, reamer, lathe, and other machine tools. Upon the completion of the course, certificates of proficiency are awarded to the men who have attained a sufficiently high standard in their work.

The School of Instruction for Enlisted Men of the Regular Army selected for detail for duty with the Organized Militia.—The object of the schools is to prepare enlisted men for detail with the Organized Militia. The schools are located at Fort Leavenworth, Kans., and Fort Monroe, Va., and are under the direction of the commanding officers of those posts. The classes are assembled on July 1, and the period of instruction is seven weeks. The following subjects are included:

(*a*) Preparation of letters, records, reports, returns, requisitions, rolls, and matters relating to official correspondence.
(*b*) Army Regulations.
(*c*) Militia Regulations.
(*d*) Manual of Guard Duty, and guard mounting.
(*e*) Care and use of uniforms, accouterments, and kits.
(*f*) Care and use of rations.
(*g*) Military hygiene in camp and on the march (including first-aid instruction).
(*h*) Duties of enlisted men in connection with patrols, reconnaissance, messages, and reports.
(*i*) Elements of advance and rear guard duty, outposts, and combat.
(*j*) Manual of the rifle, pistol, saber, and colors; tent pitching.

In addition to the foregoing the enlisted men under instruction will be required during the course to demonstrate that they are proficient in the drill regulations of their own arm of the service and in the nomenclature and care of the weapons pertaining thereto.

The Engineer Trade Schools.—The object of these schools is to train the enlisted men of the Engineer Corps in the practical duties of their profession. They are conducted under the supervision of the Battalion Commander. The courses comprise instruction in carpentry, blacksmithing, plumbing, map making, lithography, and photography.

THE ARMY WAR COLLEGE.

The purpose of the War College is to make a practical application of knowledge already acquired, not to impart academic instruction. Its personnel is in part permanent and in part temporary. The former consists of a president, a general officer assigned to that duty by the Secretary of War; and a division of the General Staff; the latter of such officers not below the grade of captain as may be detailed by the War Department. Officers of the Organized Militia are, under certain conditions, allowed to attend. The tour of duty of the student officers is for a period not to exceed 12 months, beginning on November 1 of each year. The objects of the War College in detail are:

(*a*) The direction and coordination of military education in the Army and in civil schools and colleges at which officers of the Army are detailed under acts of Congress, and the extension of opportunities for investigation and study in the militia of the United States.

(*b*) To provide facilities for and to promote advanced study of military subjects and to formulate opinions of the college body on the subjects studied for the information of the Chief of Staff.

SCHOOLS OF INSTRUCTION FOR COLLEGE STUDENTS.

The object of these schools is to give to those college undergraduates of the country who are desirous of accepting it the opportunity for a short course in military training. The course lasts five weeks and is held during the summer vacation period. The schools are administered by Regular Army officers. The course comprises the following:

(*a*) The theoretical principles of tactics, including advance and rear guards, patrols, outposts, and combat.

(*b*) Military map-making and road sketching.

(*c*) The use and care of the rifle.

(*d*) Practical camping.

(*e*) Lectures on various military subjects.

EDUCATIONAL AGENCIES OF THE UNITED STATES NAVY.

[Furnished by the Secretary of the Navy, at the request of the Commissioner of Education.]

THE UNITED STATES NAVAL ACADEMY.

1. The United States Naval Academy at Annapolis, Md., is for the broad purpose of educating officers for the line of the Navy. It was founded in 1845, and was then known as the "Naval School," but from time to time its organization has been changed, and for a number of years it has been known as the "Naval Academy." The students are "midshipmen," appointed by the President of the United States (10 annually) and by Senators and Representatives in Congress, each Senator and Representative being entitled to maintain two midshipmen at the academy. This insures that midshipmen shall come from every State and congressional district of the Union. One each is allowed also from the Territories of Alaska and Hawaii and from the island of Porto Rico. The number in attendance varies; October 1, the beginning of the present academic year, there were 861. The course is four years, and upon its completion the graduates are commissioned ensigns in the Navy, or they may be commissioned in the Marine Corps or certain other staff corps of the Navy. The average number of graduates for the past five years has been about 157. Examinations for admission are held on the third Tuesday in February and the third Tuesday in April of each year. The questions are prepared at the Naval Academy, and the examinations are held under the auspices of the Civil Service Commission, at a large number of points throughout the United States. The general scope of the entrance examinations is such that they should be successfully passed by young men who are well-grounded in high-school requirements up to about the third year of high school. Briefly, the general character of these examinations is as follows:

ENTRANCE EXAMINATIONS.

Reading and writing: Candidates must be able to read understandingly, and with proper accent and emphasis, and to write legibly, neatly, and rapidly.

Spelling: They must be able to write from dictation a list of about 100 selected words; the spelling throughout the written examination is also considered in making up the mark for spelling; they must be familiar with the rules of punctuation and the use of capitals.

Grammar: Candidates must exhibit thorough familiarity with English and grammar.

Geography: Candidates are required to pass a satisfactory examination in descriptive geography, particularly of our own country. Questions are given under the following heads: Definitions of latitude and longitude, including problems with regard to differences of time between places; the zones; grand divisions of land and water; character of coast lines; and many other questions relating to principal rivers, tributaries, bays, gulfs, etc. The following-named textbooks are used in

preparing examination questions: Mitchell's New School Atlas; Complete Geography, by A. E. Fry; Natural Advanced Geography, by Redway and Hinman.

United States history: The examination in this branch includes questions concerning the early settlements in this country; the forms of government in the colonies, the causes, leading events, and results of wars; and prominent events in the history of our Government since its foundation. The following-named textbooks are used in preparing examination questions: A Student's History of the United States, by Edward Channing; The Students' American History, by D. H. Montgomery; A School History of the United States, by John Bach McMaster.

Arithmetic: The candidate's knowledge of arithmetic must be accurate, including all the fundamental operations and principles. In other words, he must possess such a complete knowledge of arithmetic as will enable him to proceed at once to the higher branches of mathematics without further study of arithmetic. The required ground is completely covered by any one of the following textbooks: Advanced Arithmetic, by G. A Wentworth (first 16 chapters); A High School Arithmetic, by Wentworth and Hill; Standard Arithmetic, by William J. Milne; Arithmetic in Theory and Practice, by J. Brook-Smith.

Algebra: The examination in algebra includes questions and problems upon the fundamental rules, factoring, greatest common divisor, least common multiple, algebraic fractions, equations of the first degree, with one or more unknown quantities, simplification of expressions involving surds, and the solution and theory of quadratic equations, problems involving the formation of simple and quadratic equations, and the meaning and law of exponents, positive, negative, and fractional. The requirements are fully expressed in Wentworth's College Algebra (Revised), first 14 chapters, or Wentworth's Elementary Algebra, first 21 chapters; Milne's Academic Algebra, 324 pages.

Geometry: In geometry, candidates are required to give accurate definitions of terms used in plane geometry, to demonstrate any proposition of plane geometry as given in the ordinary textbooks, and to solve simple geometrical problems, either by a construction or by an application of algebra. Either of the following textbooks cover the ground required in geometry: Wentworth and Hill's Plane and Solid Geometry (5 books); Robbin's Plane Geometry; Chauvenet's Geometry (5 books).

Candidates are required to be of good moral character, physically sound, well formed, and of a robust constitution. After having successfully passed the mental requirements, they are examined at the Naval Academy by a board of medical officers, the physical examination being most thorough. In order to save those who have disqualifying physical defects the expense of traveling from their homes to the Naval Academy for this physical examination, arrangements have been made for a preliminary examination of candidates at various naval stations and recruiting offices, fairly well distributed throughout the United States. This preliminary examination will not entitle the candidate to entrance, as he must subsequently be examined by the statutory medical board at Annapolis, but its effect would be to detect disqualifying defects, which would render it useless for the candidate to go to the Naval Academy; or it might bring to light a temporary defect which after proper treatment would no longer be disqualifying. Candidates must be unmarried, and any midshipman who shall marry, or who shall be found to be married before his graduation, will be dismissed from the service.

COURSE OF INSTRUCTION AT THE NAVAL ACADEMY.

The course of instruction is apportioned among departments, as follows: (1) Discipline (which includes physical training); (2) seamanship; (3) ordnance and gunnery; (4) navigation; (5) marine engineering and naval construction; (6) mathematics and mechanics; (7) electrical engineering and physics; (8) English; (9) modern languages; (10) naval hygiene and physiology.

Distribution of studies and instruction.

First year: Mechanical drawing; algebra; geometry, trigonometry; logarithms; English; French and Spanish; practical instruction in seamanship, ordnance, target practice, infantry tactics, field artillery, sword exercise, sailing, rowing, swimming, gymnastics, dancing.

Second year: Mechanical drawing; marine engineering; calculus; analytical geometry; stereographic projections; applied calculus; physics and chemistry; electrical engineering; English literature; United States naval history; French and Spanish; practical instruction in seamanship, ordnance, target practice, infantry tactics, field artillery, marine engineering, sailing, rowing, sword exercise.

Third year: Seamanship; ordnance and gunnery; astronomy; navigation; marine engineering; principles of mechanism; theoretical and applied mechanics; electrical engineering; practical instruction in seamanship, ordnance, target practice, infantry tactics, field artillery, marine engineering, steam tactics, signals, sword exercise.

Fourth year: Seamanship; international and military law; ordnance and gunnery; navigation; deviations of the compass; marine surveying; marine engineering; naval construction; experimental engineering; engineering materials and machine designing; electrical engineering; French and Spanish; physiology and hygiene; practical instruction in seamanship, ordnance, target practice, marine engineering, navigation, compass deviations, surveying, steam tactics, electrical engineering, torpedoes and mines, infantry tactics, field artillery, sword exercise.

POSTGRADUATE COURSES.

2. In 1904, postgraduate instruction in ordnance and in steam engineering was established, as a result of the recommendation of the chiefs of the Bureaus of Navigation, Ordnance, and Steam Engineering. As a result of this, 35 student officers have taken the ordnance course, and 9 are now thus engaged. Eight student officers took the engineering course prior to 1909, when the School of Marine Engineering was established at Annapolis, Md. From this school 17 officers have been graduated.

In 1912 the postgraduate department of the Naval Academy was formed, into which the School of Marine Engineering was naturally merged. Twenty-eight student officers have taken, or are taking, the course in marine engineering, which is divided into four specialties: Marine engine design, electricity, radio, and shop management. The first year's work is done at the Naval Academy, and the second at Columbia University. The ordnance, naval construction, and civil engineering student officers take the review course at the postgraduate

department before taking their special course at the gun factory, powder factory, and armor plants (in the case of ordnance students), and at Massachusetts Institute of Technology and the Troy Polytechnic Institute in the case of the naval constructors and civil engineers, respectively. The object of establishing this postgraduate course was to enable young officers to obtain intimate scientific knowledge of the subjects indicated above, with a view to becoming specialists in some one or more of these subjects. The knowledge gained from the postgraduate course is expected to be further utilized by continued study and application by the officers along the lines in which they intend to specialize.

THE NAVAL WAR COLLEGE, NEWPORT, R. I.

3. The Naval War College is for the purpose of teaching officers the art of naval warfare. Under this heading may be specified strategy, tactics, military policy, military character, organization, administration, strategic studies of campaigns, tactical studies of battles, plan-making, logistics, bases, building program, and allied topics. Owing to a scarcity of officers who could be spared to attend the War College, the course there has been somewhat irregular, and up to the present has consisted of (1) a short course of 4 months, beginning June 1 and ending September 30, and (2) a long course of about 16 months. But few officers so far have completed the long course. At present there are about 20 officers at the War College who will complete a course of about one year. It is probable that the long course will be abolished, and that the course for one year will be made standard. The work of instruction at the War College is conducted by a line officer of high rank who is detailed as president, assisted by a staff of several officers, who have specialized more or less in the subjects of instruction.

TRAINING STATIONS AND SCHOOLS.

4. The Navy maintains four stations for training newly enlisted recruits, located, respectively, at Newport, R. I., Norfolk, Va., Great Lakes, Ill., and San Francisco, Cal. The course of training usually covers about three months, after which the apprentice seamen are rated ordinary seamen or coal passers, and transferred to the general service. During the fiscal year approximately 5,855 ordinary seamen and 1,368 coal passers were rated and sent to sea, and 2,720 remained under instruction at the end of the year. At three of these training stations, namely, Newport, Norfolk, and Great Lakes, a school system has been inaugurated, and it will soon be extended to the fourth station. Until very recently academic education has not been a part of the training station's system, but within the past few months this has been made an important part of the training. It is again referred to in another part of this report.

YEOMAN SCHOOLS.

5. It may be explained that yeomen are rated enlisted men of the Navy, who perform clerical work, including typewriting and stenography, on board ship and at naval stations. There are two yeoman schools, one at Newport, R. I., and the other at San Francisco, Cal. These schools are divided into two branches, accounting and correspondence. Recruits who have had clerical experience and pass the necessary preliminary examination are sent to the yeoman school upon enlistment, as well as enlisted men who are recommended by their commanding officers for this instruction. During the fiscal year approximately 223 men completed the course and were rated yeomen, while 100 remain under instruction.

MUSICIANS' SCHOOLS.

6. Three schools for musicians are maintained, at Norfolk, Va. (where the largest number of men are instructed), at Newport, R. I., and San Francisco, Cal. Musicians who enlist are detailed for instruction as musicians in the service. During the fiscal year approximately 247 men completed this course of instruction, and 113 remained under instruction.

COMMISSARY SCHOOLS.

7. There are two schools, one located at Newport, R. I., and the other at San Francisco, Cal. The instruction is divided into three branches, one in which men are instructed in the duties of commissary stewards, another the cooking class, and the other the baking class. Since the establishment of the schools for instruction of cooks and bakers the service has been greatly benefited, and there is less dissatisfaction with the food, owing to the uniform method of cooking which now exists. During the past fiscal year approximately 157 men completed the instruction at the three schools, while 74 remained under instruction.

ARTIFICER SCHOOL.

8. At the artificer school, which is located at Norfolk, Va., men are taught the work of the blacksmith, plumber and fitter, painter, shipfitter, carpenter's mate, or shipwright, etc. The course usually lasts three months. During the fiscal year approximately 163 men completed this course of instruction, and 80 remained under instruction.

ELECTRICAL SCHOOLS.

9. There are two electrical schools, which are located at Mare Island, Cal., and at the navy yard, New York, respectively. The

instruction in these schools is divided into two branches, one for general electricians and the other for radio electricians. This division of instruction enables the men to do a greater amount of study on the particular branch in which they are specializing, with the result that more competent electricians of both kinds are turned out. During the fiscal year approximately 365 men completed the electrical course and were transferred to general service, while 248 remained under instruction.

MACHINIST'S MATES' SCHOOL.

10. This school was originally established at the navy yard at Norfolk, and was transferred to the navy yard at Charleston, S. C., in the early part of 1912. The course of instruction covers a period of 16 months, and its purpose is to turn out competent machinists to supply the great need that exists for men of this class on board modern vessels. The equipment of the school consists of lathes, shapers, milling machines, drill press, and boring machines, with coppersmith, machinist, and tinning benches. During the fiscal year approximately 150 men completed this course of instruction, and 140 remained under instruction.

SEAMEN GUNNER SCHOOLS.

11. There are two seamen gunner schools, one at Newport, R. I., where instruction in torpedoes is given, and the other at the navy yard, Washington, D. C., where the men are instructed in general ordnance work. During the fiscal year approximately 313 men completed the instruction in these two schools, while 210 remained under instruction. Only continuous-service men—that is, those men who reenlist within four months after receiving honorable discharge at the expiration of previous enlistment—are permitted to go to the machinist's mates' school or to the seamen gunner schools.

AVIATION SCHOOL.

12. There is a school or camp of instruction in aviation at present located at Annapolis, Md. It is not permanently located anywhere, but moves to Guantanamo or other places as circumstances render it advisable. Only officers are permitted to fly at present, but enlisted men are employed in connection with the work and the care, repair, and upkeep of the machines. There is under consideration the establishment of an aeronautic center where comprehensive instruction will be carried on and will include work with dirigibles as well as that with aeroplanes.

Naval Educational System in the Fleet.

SCHOOLS ON BOARD SHIP.

13. The following plan for the instruction of enlisted men, petty officers, and warrant officers of the Navy serving on board ship was put into effect January 1, 1914, with a view to supplying deficiencies in academic education, and also to provide systematic means by which all enlisted men and warrant officers may receive assistance and encouragement in technical branches in order to fit them for promotion in the Navy, as well as for civil trades at the end of their period of service afloat.

14. The instruction under the two heads—academic and technical or professional—is under the general charge of the executive officer, assisted by all commissioned officers and by such warrant and petty officers as are necessary in the different departments on board ship.

15. Division officers are required to carefully examine all men under their supervision, noting the deficiencies of each man, the amount of instruction he may have received at the training station, the branches in which further instruction is most needed, the fitness of each man for promotion, the branch for which he is best suited, and the personal preferences and ambitions of each individual, in order that classes may be formed to secure progress and improvement in the mental and technical training of men in every branch of the Navy service.

THE ROUTINE ON BOARD SHIP.

16. The routine on board ship is so arranged that the following general principle, as regards the employment of the men, may be followed as far as possible:

(1) To 9.15, cleaning and shipwork (all hands);
(2) 9.15 to 11.45, drills and routine duties;
(3) 11.45 to 1.15, dinner and recreation;
(4) 1.15 to 2.30, instruction and school;
(5) 2.30 to 4.30, drill, ship work, and recreation.

17. No work is required during the instruction period, except in cases of emergency or necessity, this period being devoted to the self-improvement of every man in the ship and to the instruction of those who are ambitious for immediate or ultimate promotion. It is an "all hands" period of study and instruction.

18. Whenever the weather or the circumstances of service of any particular ship or ships are such that additional time during the day may be given to instruction, commanding officers will be urged to increase the periods of instruction and to encourage night classes when practicable. In case climatic or other conditions demand a change in the routine or a different hour for instruction, the com-

manding officer will depart from the routine as prescribed above, keeping in mind, however, the object to be attained and the progress that must be assured.

ACADEMIC DEPARTMENT.

19. The instruction in this department will be required of all enlisted men as they come from the training schools or from enlistment, and of all men in the first two years of their enlistment. Until otherwise ordered, the academic instruction as to other enlisted men will be voluntary as a rule, but the commanding officer may compel men who are deficient to take such instruction as may be necessary to bring them to a proper and reasonable standard in elementary branches. The subjects embraced in this department will be reading, writing, arithmetic, spelling, geography, and history. A certain number of textbooks on these subjects will be furnished by the Navy Department and will be kept in the crew's library, and all books in the library will be utilized as far as possible. The scope of the work in each branch of study will be decided by circumstances. The men should be interested in the geography of the whole world to a certain extent, and it is the intention of the department strongly to emphasize the history of our own country and of the United States Navy, and of our naval campaigns and battles. Officers who serve as instructors in each division will be requested to assist any men who wish to take up algebra, higher mathematics, and other academic branches not included in the elementary school, utilizing preferably textbooks both academic and technical, which may be in use at the Naval Academy.

CORRESPONDENCE SCHOOLS.

20. An officer on board ship will be assigned to supervise and assist the work of all enlisted men who, by reason of their initiative and ambition, may have taken up correspondence courses with outside institutions. It is not the intention to interfere with the freedom of action of individuals in such matters, but rather to encourage and advise them particularly until such time as the perfection of service schools may, perhaps, in the estimation of the men themselves, serve to meet all their requirements and satisfy all their needs. This, then, will be considered a distinct department and will be assigned a separate, suitable part of the ship during the school period.

WARRANT OFFICERS' SCHOOLS.

21. All warrant officers who may be eligible and wish to prepare for examination for a commission in the Navy will be encouraged by their commanding officer, who will afford them all possible facilities

for study and will assign a competent officer to superintend their instruction.

CHIEF PETTY OFFICERS' SCHOOL.

22. All chief petty officers and others who may aspire to warrant rank will be formed into a class for instruction, and an instructor will be detailed to assist them in preparing for the examination.

COMMISSARY AND PAY DEPARTMENT SCHOOL.

23. Enlisted men in the commissary branch, pay department, or other divisions on board ship, who may wish to prepare themselves for promotion to commissary steward, or to qualify eventually for pay clerks or for a commission as paymaster in the Navy, will receive every encouragement and assistance. It is the intention to prepare for this purpose suitable manuals, and those books now in existence will be revised to meet future requirements. The pay officers, clerks, stewards, and cooks on board ship will act as instructors in these branches.

SCHOOL FOR HOSPITAL BRANCH.

24. The department will also encourage all men in the hospital branch of the service to seek promotion in their corps, and all available manuals and treatises in first aid, hygiene, and other subjects necessary to qualify men for advancement to the rate of hospital steward and pharmacist will be utilized.

MAN-OF-WAR AND MILITARY INSTRUCTION.

25. It is the intention definitely to prescribe the necessary qualifications for ordinary seaman, seaman, boatswain's mates, and all other petty officers or chief petty officers; and every man in those ratings, or who may seek promotion to them, will be required to study and fit himself to attain the required standard. In order to secure uniformity throughout the Navy and to perfect the training of our men, it is proposed to revise and rearrange the Bluejacket's Manual, the different chapters of which may treat of the duties of the several rates in the Navy, every man being required to study and qualify himself thoroughly on all subjects contained in the chapter devoted to his particular rate. It is intended to give a certain amount of suitable instruction along naval lines to all men, regardless of rate, including barbers, bandsmen, mess attendants, and others who ordinarily receive no instruction whatever outside their daily routine duties.

MARINE SCHOOL.

26. A school, or scheme of instruction, similar to the foregoing, will be prescribed for marines ashore and afloat, by the Major General Commandant of the Marine Corps, and approved by the Secretary of the Navy.

TECHNICAL AND TRADE BRANCHES.

27. Under this head are included all the skilled and mechanical trades in the engineer, electrical, and other departments of a modern ship—machinists, coppersmiths, boilermakers, blacksmiths, water tenders, oilers, electricians, wireless operators, stenographers, typewriters, carpenters, painters, etc. A manual or manuals, similar in character to the Bluejacket's Manual, will be provided to deal with all these subjects. Certain handbooks now available fulfill the requirements to a certain degree, and by revision and amplification these books may easily be perfected and kept up to date.

REPORTS.

28. The Navy Department will prescribe systems of reports at least quarterly, from all ships, in order that conditions as to progress and the necessity for changes and improvements may be noted.

INDIAN EDUCATION DURING THE FISCAL YEAR 1913.

(Furnished by the Commissioner of Indian Affairs, at the request of the Commissioner of Education.)

During the year the Government maintained 37 nonreservation boarding schools, with an enrollment of 10,702; 74 reservation boarding schools, with an enrollment of 9,523; and 216 day schools, with an enrollment of 7,356, an increase over the previous year of more than 3,000 pupils. This increase was due to the activities of Indian school officials in encouraging Indian children to enter school, and to the growing interest in the educational welfare of their children manifested by Indian parents.

The academic work at each Indian school is modeled upon the course of study in use in the public schools of the State in which the school is located. This course of study is, however, modified so as to give very greatly increased attention to industrial training. The economic independence of the Indian must come as a result of industrial and vocational training of the boys and girls. The entire Indian school system is organized and conducted with this end in view.

During the first years in school, which are spent in day schools, girl pupils are taught basketry, mat weaving, simple sewing, and the performance of minor duties in connection with the care of the household. The boys are taught gardening, the use of simple tools, and the

care of stock. In the reservation boarding school the girls are taught regular household duties, sewing, laundering, and baking; the boys are taught regular shop work, the cultivation of the soil, dairying and stock raising, a farm being conducted at each reservation boarding school.

At the nonreservation boarding schools the girls are instructed in domestic science, and as an aid to this instruction there is frequently provided a domestic science cottage wherein a definite course in the household arts may be taken, each girl living for a time in this cottage and performing all the household duties under the direction of a competent instructor. In some of the larger boarding schools an "outing system" is maintained. Under this system the boy or girl is sent to the home of a reputable and industrious family where the boy assists with the farm work under the direction of the farmer, or the girl is taken into the house to assist in the household work, care of poultry and dairy products, under the direction of the farmer's wife. The pupil often has an opportunity to attend a public school near the farm home, the academic training being thus continued while the pupil gains practical farm experience in farm work.

The nonreservation boarding schools afford an opportunity for Indian pupils to learn various trades by which they can become self-supporting, if circumstances or their own desires do not tend to make farmers of them. Instruction is given in carpentering, woodworking, blacksmithing, electrical and stationary engineering, brick and stone masonry, plumbing, tailoring, painting, printing, baking, harness and shoemaking, wagon making, and cement work.

In some schools small tracts of land are set apart on the farm for one or two boys to cultivate. Each tract is charged with all expenses necessary to put it into proper cultivation, purchase seeds, etc., and the labor of tending the crops, and is credited with the returns. This teaches the pupil to plan his season's work as would be necessary were he placed upon his own resources with his own farm.

The health of the pupil is a question of primary importance, and it receives constant attention in every school. Physicians are stationed at practically every boarding school, and sick pupils are promptly and carefully treated. A number of hospitals have been constructed, and there are a few sanatoria wherein pupils with incipient tuberculosis may receive academic and industrial training suited to their condition, while they are under the direct care of a physician. Gymnasiums have been constructed at many schools, particularly in the Northern States, where the winters are long and opportunities for outdoor exercise limited. The pupils are taught the great value of fresh air in the preservation of health, and screened sleeping porches are built where conditions permit their use. Boarding schools are not permitted to retain pupils unless there is sufficient air space in the dormitory to allow at least 500 cubic feet per pupil.

It has been the continuous practice of the Indian Bureau to assign the duty of supervising Indian schools to supervisors of broad educational attainments and industrial equipment, familiar with the peculiar problems which arise in adapting the school system of the whites to the educational necessities of Indian youth. The supervisor of Indian employment, an Indian himself, is charged with the important duty of following up returned students. He is in touch with various business enterprises which furnish employment for Indians who do not care to take up the actual farming of their allotments.

The educational work for the Indian does not cease with his return from the Government school. The reservation superintendent is required to keep in touch with returned students and to see that they are encouraged, with the aid of the Government farmer, to develop their allotments into a means of support, or to get them started in some other gainful occupation which will render them self-supporting.

Through the supervisor of Indian employment and the superintendent of the reservations upon which returned students make their homes the work of the Government school is continued and made of lasting benefit. Each of the various activities of school and reservation work is under the direction of a supervisor of long training and experience in his particular field, and thus each branch of the work receives expert attention and is woven into the general plans of the Indian Office to raise Indian civilization to a higher plane.

EDUCATION OF NATIVES OF ALASKA.

Report by WILLIAM T. LOPP,

Superintendent of Education of Natives of Alaska.

CHARACTER OF THE WORK.

During the fiscal year ended June 30, 1913, the field force of the Alaska school service consisted of 5 superintendents, 109 teachers, 11 physicians (1 of whom also filled another position), 9 nurses, and 3 hospital attendants. Seventy-seven schools were maintained with an enrollment of 3,563, and an average attendance of 1,797.

In Alaska there are, approximately, 25,000 natives in villages ranging from 30 or 40 up to 300 or 400 persons, scattered along thousands of miles of coast line and on the great rivers. Some of the villages on remote islands or on the frozen ocean are brought into touch with the outside world only once or twice a year, when visited by a United States revenue cutter on its annual cruise or by the

supply vessel sent by the Bureau of Education. During eight months of the year all of the villages in Alaska, with the exception of those on the southern coast, are reached only by trails over the snow-covered land or frozen rivers. In spite of the difficulties of the problem a United States public school has been established in each of 77 villages. In many instances the school is the only elevating power in the native community.

Every teacher is a social worker, who, in addition to performing the routine work in the schoolroom, strives in every possible way to promote the physical, moral, and industrial welfare of the natives, adults as well as children. In the school rooms the endeavor is made to impart to the children such instruction as will enable them to live comfortably and to deal intelligently with those with whom they come in contact; instruction in carpentry, cooking, and sewing is emphasized. Each schoolhouse is a social center for the accomplishment of practical ends. Many of the buildings contain, in addition to the recitation room, an industrial room, kitchen, quarters of the teacher, and a laundry and baths for the use of the native community. The schoolroom is available for public meetings for discussion of affairs of the village or, occasionally, for social purposes.

In the native villages the teachers and nurses endeavor to establish proper sanitary conditions by inspecting the houses, by insisting upon proper disposal of garbage, and by giving instruction in sanitary methods of living. Natives are encouraged to replace their filthy huts by neat, well-ventilated houses. In some sections the natives have been taught to raise vegetables, which are a healthful addition to their usual diet of fish and meat.

There are extensive regions in which the services of a physician are not obtainable. Accordingly, it often becomes the duty of a teacher to treat minor ailments, to render first aid to the injured, or to care for a patient through the course of a serious illness.

In its endeavor to safeguard the health of the natives of Alaska, the Bureau of Education maintains four small hospitals in important centers of native population; contracts with three hospitals for the treatment of diseased natives; employs traveling physicians who devote their entire time to medical and sanitary work among the natives in their respective districts; employs nurses who assist the physicians and do exceedingly valuable work among the children and in the villages; and provides medical supplies and textbooks to the teachers to enable them to treat minor ailments and intelligently to supervise hygienic measures. The entire medical and sanitary work of the Bureau of Education in Alaska is under the supervision of an officer of the Public Health Service on special detail.

For the immediate supervision of its work among the natives of Alaska, the Bureau of Education depends upon its five district super-

intendents, men of proved ability and fidelity, who, under the provisions of the rules regulating the service, have the greatest freedom of action consistent with the ultimate responsibility of the Commissioner of Education.

MEDICAL WORK.

Among the most urgent needs of the natives of Alaska is protection against the diseases which prevail among them to an alarming extent. There is no specific appropriation for the support of medical work among the natives of Alaska. For several years the Bureau of Education has been striving, without success, to secure funds for the establishment of well-equipped hospitals and for the employment of a sufficient number of physicians and nurses. Under the terms of the appropriation for "Education of Natives of Alaska" the Bureau of Education can employ physicians and nurses for work among the Alaska natives, but it can not erect the hospitals which are greatly needed. Of the appropriation for the education of natives of Alaska for the fiscal year ending June 30, 1913, $31,758.13 was expended for medical work, including: (1) The maintenance of hospitals in rented buildings at Juneau and Nushagak; (2) the maintenance of improvised hospitals in school buildings at Nulato and Kotzebue; (3) payments under contract with the Holy Cross Hospital at Nome, with the Fairhaven Hospital at Candle, and with the Cordova Hospital for the treatment of diseased natives upon the application of a superintendent, physician, or teacher in the Alaska school service; (4) the employment of physicians and nurses in the hospitals and in fieldwork in their respective districts, and (5) furnishing medicines and medical books to the teachers for use in relieving minor ailments. Nearly 1,800 cases were treated in the hospitals at Juneau, Nushagak, Nulato, and Kotzebue during 1912–13. The most prevalent diseases were tuberculosis, trachoma, rheumatism, and venereal diseases; the surgical operations included excisions for tubercular diseases of the bones, the removal of tubercular glands, laparotomies, curetting of ulcers, setting broken bones, sewing up recent wounds, and excisions of hemorrhoids, cataracts, abscesses, tonsils, and adenoids. During the year epidemics of infantile paralysis at St. Michael and of diphtheria at Nulato were checked by physicians employed by the Bureau of Eduation. At Nulato, under the provisions of the health law passed by the Alaska Territorial Legislature at its first session, Dr. Bruce H. Brown established effective quarantine. In March, 1912, upon the request of the Secretary of the Interior, Passed Asst. Surg. Emil Krulish, of the Public Health Service, was detailed for service in Alaska, in order that the medical work among the natives might have expert supervision. Dr. Krulish spent from April to November investigating health conditions in the native settlements in south-

eastern Alaska, in western Alaska as far as Cook's Inlet, on the Yukon River, and in the vicinity of Nome. In his report Dr. Krulish states that in his opinion 15 per cent of the native population of Alaska is infected with tuberculosis in its varying forms, both active and latent, while in 7 per cent it is present in its active stages. Trachoma, rheumatism, and venereal diseases also prevail to a considerable extent in many of the native villages.

An appropriation of at least $125,000 is needed to establish an Alaska medical service with an efficient organization for the natives of Alaska. The good results already accomplished by the present inadequate service demonstrate that disease among the natives of Alaska can be eradicated if funds are provided for the establishment of well-equipped hospitals in important centers and for the employment of a sufficient number of physicians and nurses.

RESERVATIONS.

Experience has proved the wisdom of reserving, in certain localities, tracts of land exclusively for the use of the natives of Alaska, where, secure from the evil influence of unprincipled white men, the natives can build up their own industries. By Executive order, June 19, 1912, a tract of approximately 12 square miles on the west coast of Prince of Wales Island, in southeastern Alaska, was reserved for the use of a colony of natives who had migrated thither from the villages of Klinquan and Howkan and founded a settlement which they named Hydaburg. Under the supervision of the teacher of the United States public school the Hydaburg Trading Co. was organized to transact the mercantile business of the settlement and the Hydaburg Lumber Co. to operate a sawmill. These enterprises have been eminently successful. The prosperity of the Hydaburg colony caused the natives of Klukwan and of Klawock, in southeastern Alaska, to desire similar reservations upon which to conduct their own enterprises. By Executive order, April 21, 1913, a tract with an approximate area of 800 acres, bordering the Chilkat River, was reserved for the exclusive use of the Klukwan natives. Much of this land has agricultural value, and gardening will be systematically taught by the teacher of the United States public school. The proposed reservation at Klawock is within the Tongass National Forest; negotiations are in progress with the Forest Service for its reservation.

ECONOMIC AID TO NATIVES.

The reindeer service.—A very important part of the work of the Bureau of Education for the natives of Alaska is the assistance rendered them in their economic and industrial development. Foremost among the enterprises undertaken in this direction is the rein-

deer service, which in the 20 years of its existence has become a vast wealth-producing native industry in northern and western Alaska. At an average of $25 per head the 24,068 reindeer owned by the natives June 30, 1912, represented a capital of $601,700. The total income of the natives from the reindeer industry during the same fiscal year was $44,885, exclusive of the value of the meat and hides used by the natives themselves.

Cooperative stores.—Throughout Alaska there are in small native villages some traders who charge exorbitant prices for the imported food and clothing which, with the changing environment, have unfortunately become necessities of life for the natives. Valuable furs and other native products are frequently bartered for imported goods at rates which keep the natives hopelessly in debt to the traders. In very many villages there are less than 100 natives; even the legitimate freight and profit which any trader must charge is a heavy burden on such small settlements. The Bureau of Education therefore fosters the establishment of cooperative stores owned and managed by the natives themselves. By thus relieving themselves of the burden of the profit exacted by the middleman the natives are able to secure the necessities of life at the lowest prices and can at their own local stores obtain equitable value for their furs, ivory, woven baskets, and other native products. The wisdom of the policy of thus assisting the natives to help themselves has been especially demonstrated at Hydaburg, in southeastern Alaska, where, under the general oversight of the teacher, the native management of the cooperative store, after 12 months of existence, was able to declare a cash dividend of 50 per cent and still had funds available toward the erection and equipment of a larger store building. Native stores have for several years been successfully conducted at Wales and Gambell in northern Alaska.

For many years economic conditions have been especially deplorable among the natives of Atka, a remote island in the Aleutian chain, visited only by one of the revenue cutters on its annual cruise and by a trading schooner. On this untimbered island the local price for rough lumber was $50 per thousand and $8 per thousand for shingles, with proportionate charges for the articles of clothing and for the food supplies kept by the local trader. For each of the skins of the few blue foxes caught the natives received from the trader goods averaging $8 in value. In Seattle, rough lumber sells for $12 per thousand, and shingles at $2.25 per thousand, and the blue foxes sent out by the Atka natives during the summer of 1913 brought at public auction in Seattle from $17.10 to $66.50 each, according to quality. In April, 1913, it was found possible, with the cooperation of the Revenue-Cutter Service and philanthropic merchants in Seattle, to aid the natives of Atka to establish their

own store. The merchants consented to advance the original stock for the store to the value of about $1,500, and measuring approximately 15 tons, which the Revenue-Cutter Service delivered at Atka free of charge. Under the direction of the teacher, a local cooperative company was organized and the natives will as rapidly as possible pay the Seattle merchants for the goods advanced. Detailed reports of the operations of the company will be submitted to the chief of the Alaska Division, and, with the approval of the Treasury Department, the commanding officer of the revenue cutter visiting Atka will audit, from time to time, all financial transactions connected with the enterprise and aid in every way in its successful operation.

Sale of native products.—One of the problems of the work has been to provide a market for the furs and ivory obtained by the Eskimos on the shores of Bering Sea and the Arctic Ocean and in other remote regions. Formerly it was possible for these natives to dispose of their wares only to local traders. With the extension of the mail service, many natives now forward by mail packages of fox, lynx, mink, and hair seal to the supply and disbursing office of the Alaska Division in Seattle, which, through the Seattle Fur Sales Agency, sells the furs by public auction to the highest bidder. The net proceeds of furs, ivory, and whalebone sold in Seattle for the natives during the fiscal year ended June 30, 1913, was $4,144.

Salmon industry.—A successful experiment in salting and exporting salmon bellies was conducted by the natives of Tatitlek during the summer of 1913, under the instruction and supervision of the teacher. In the spring a wholesale dealer in salt fish in Seattle furnished to the Tatitlek natives 100 barrels of salt for guaranteed prices on the various species of salmon; the Bureau of Education provided the fishing equipment, including one drag seine and two gill nets. As a result of the season's work, 130 barrels of salted salmon bellies have been sent to Seattle by the Tatitlek natives, which will net them more than $1,000. The law requires that the natives must preserve the backs of the fish and use them for food. Accordingly, as the result of this undertaking, the Tatitlek natives will have, in addition to the cash received, approximately 75,000 smoked salmon for winter use.

LEGISLATION.

Among the most urgent needs of the work of the Bureau of Education for the natives of Alaska have been (1) legislation compelling regular attendance in the schools, (2) legislation giving the employees of the Bureau of Education in Alaska power legally to enforce in the native villages obedience to their instructions with reference to matters relating to health, and (3) legislation regulating the civic rights of the natives. It is gratifying that at its first session the Alaska Territorial Legislature took action regarding two of these

matters. The compulsory school attendance law makes attendance obligatory upon all native children between the ages of 8 and 16 (unless physically or mentally incapacitated) residing within 1 mile of a United States public school.

The law regulating the registration and restriction of communicable diseases in Alaska provides that in any native village any representative of the Bureau of Education shall have power as health officer to enforce quarantine regulations, to cause garbage to be removed, to disinfect persons, houses, or property, and to cause furniture or household goods to be destroyed when they are a menace to the public health. Violations of the regulations made or disobedience of orders given under the authority of this law are punishable by a fine not exceeding $100 or by imprisonment for not more than 50 days, or by both fine and imprisonment. The Territorial legislature also passed a bill to amend the Penal Code of Alaska, making the soliciting, purchasing, or receiving of liquor by a native a criminal offense.

RECOMMENDATIONS.

1. Medical relief.—Adequate and special provision for the medical and sanitary relief of the Eskimos, Indians, Aleuts, and other natives of Alaska is imperative. Most of these natives live in villages far away from any white settlement in which there is a practicing physician, and must depend on Government physicians, nurses, and teachers for ordinary medical attention and care. The use of part of the educational appropriation for medical relief is an emergency measure dictated by the absolute necessity for action. The entire appropriation is urgently needed for the support of the schools and to promote the industrial development of the natives. Under a decision of the comptroller this appropriation can not be used in erecting hospitals. Without hospitals for the segregation and proper care of natives afflicted with tuberculosis, trachoma, and other communicable diseases, it is impossible to reduce their prevalency. An appropriation of at least $125,000 is needed to establish a medical service among the natives of Alaska with an efficient organization. This is a matter of vital importance not only to the natives, but also to white settlers in Alaska.

2. Legislation regulating the civic rights of the natives.—Provision should be made for the acquiring of citizenship by properly qualified natives. At the first session of the Territorial legislature a bill was introduced creating a board of Indian commissioners in each judicial district (of which board the superintendent of the United States public schools residing in each judicial district should be a member ex officio) and providing that said board, upon application in due form, shall issue certificates of citizenship to natives found to be qualified.

The native applying for citizenship must, under oath, renounce his adherence to tribal customs. No certificate of citizenship should be issued to a native unable to read and write the English language. This bill failed of passage, and I urge that it receive favorable consideration by the Territorial legislature at its next session.

3. Transportation.—I repeat my recommendation that the Bureau of Education should own and maintain a light-draft, seagoing power schooner, capable of carrying from 250 to 300 tons, in which to transport teachers, building materials, and school supplies from Seattle to the remote schools on Bering Sea and the Arctic Ocean. The possession of such a vessel would enable the Bureau of Education to carry its employees to and from its numerous schools remote from the regular lines of travel with some degree of safety and comfort. The responsibility of sending teachers across the Pacific Ocean in such small, uncomfortable, and heavily laden vessels as have hitherto been used has caused the officials of the Alaska division no small degree of uneasiness. The present arrangement is expensive. In a few years such a vessel as is desired would pay for itself in the saving of freight charges alone. Moreover, it would provide satisfactory means of summer inspection by superintendent and physician, and, being under the complete control of the bureau, these officials could take sufficient time to perform their duties thoroughly in the various villages visited. In addition to transporting passengers and freight, such a vessel would be very useful also as a means of instructing natives in navigation, engineering, and seamanship. By its use it would also be possible economically to supply the natives in the untimbered regions with materials for use in constructing sanitary houses, and to aid them in developing fishing industries. Of the 25,000 natives in Alaska, at least 20,000 live near salt water.

4. Appropriations.—It is only during July, August, and September that supplies can be delivered at places in the interior of Alaska and on the shores of Bering Sea and the Arctic Ocean. In order to insure delivery before those regions are again closed by ice, supplies should leave Seattle not later than June 1 of each year. The appropriation for the support of the work of the Bureau of Education in Alaska, carried in the sundry civil bill, sometimes does not become available until late in the summer, with the result that the officials immediately responsible for the work of the Bureau of Education in Alaska are compelled hastily to send appointees and supplies just before the closing of navigation in these northern waters, when severe storms are encountered and the rivers are beginning to freeze. Occasionally, on account of late shipment, it has been necessary to send supplies to their destination hundreds of miles over the frozen country, at heavy expense and with great delay. Provision should be made for the availability of funds early in each summer.

5. Protection of walrus, polar bear, deer, reindeer, and caribou.—The threatened extermination of walrus in Alaskan waters demands attention. During the past three years, owing to the increased demand for walrus hide and ivory for commercial purposes, well-equipped expeditions in large power boats have killed numbers of walrus in northern Bering Sea and in the Arctic Ocean. The meat of the walrus is a staple article of food among the Eskimos, and its skin is the principal material used in the construction of their indispensable boats. Since the systematic hunting of walrus has been undertaken by white men very few walrus have been obtained by the natives, the result being a shortage of food in some of the villages along the Arctic coast. I therefore suggest that this subject be brought to the attention of the Department of State, with a view to ascertaining the feasibility of action to secure a treaty between the United States and Russia, and the other powers concerned, for the purpose of protecting the walrus in Bering Sea and in the Arctic Ocean.

I recommend that the regulations of the Department of Commerce for the protection of fur-bearing animals in Alaska be amended so as to establish an open season for the killing of polar bear between September 15 and June 15. The strict enforcement of the present regulations forbidding the killing of polar bear at any time would work a hardship on some of the Alaska Eskimos inhabiting the shores of Bering Strait and the Arctic Ocean. While most of the polar bear taken by these people are killed on the ice from 3 to 10 miles from the shore, a few stragglers are unlawfully shot while seeking food on the beach, often when robbing the native caches. The possession of a few skins taken in this manner should not jeopardize the other skins, which are taken legally beyond the 3-mile limit, and cause an Eskimo to suffer through the unwarranted activities of game wardens or other officials. Polar bears move on and with the floating ice. Their habitat is not a fixed one; therefore any regulation which can not protect them on the high seas can have little or no influence in preventing their extermination.

In order to protect deer, reindeer, and caribou from the ravages of wolves, I recommend that the Alaska game law be amended so as to place a bounty of $15 per head on wolves. Protection against the ravages of timber wolves is especially needed on the islands of southeastern Alaska, where wolves are rapidly exterminating the deer once found there in large numbers. The wolves seem to kill from pure love of slaughter; often the carcasses of deer are found untouched save for wounds on the neck and shoulder.

THE REINDEER SERVICE.

Reports from only a few of the reindeer stations covering the fiscal year 1913 have yet been received, the herds being in northern and western Alaska. The latest complete statistics regarding the reindeer service are those of the fiscal year 1912, according to which the total number of reindeer in Alaska June 30, 1912, was 38,476, distributed among 54 herds. Of the 38,476 reindeer, 24,068, or 62.5 per cent, were owned by 633 natives; 3,776, or 9.8 per cent, were owned by the United States; 4,511, or 11.7 per cent, were owned by missions; and 6,121, or 16 per cent, were owned by Lapps. The total income of the natives from the reindeer industry during the fiscal year 1911–12, exclusive of the value of the meat and hides used by the natives themselves, was $44,885.04. At an average value of $25 per head, the 24,068 reindeer owned by the natives represent a capital of $601,700.

GROWTH OF THE ENTERPRISE.

The reindeer industry in Alaska began in 1892, with the importation by the Bureau of Education of 171 reindeer from Siberia. The importation continued until 1902, and a total of 1,280 were brought from Siberia. The object of the importation was originally to furnish a source of supply for food and clothing to the Eskimos in the vicinity of Bering Strait. At that time the Eskimos on the vast untimbered grazing lands of the Arctic and Bering Sea coastal regions from Point Barrow to the Alaska Peninsula were nomadic hunters and fishermen, eking out a precarious existence upon the rapidly disappearing game animals and fish. In 20 years the reindeer industry has made of them civilized, thrifty men, having in their herds assured support for themselves and opportunity to acquire wealth by the sale of meat and skins to the white men in those regions. In addition to providing support for the natives, the reindeer furnish an assured food supply to the mining and trading settlements in Arctic and sub-Arctic Alaska in case of disaster during the long period of each year when those regions are icebound and inaccessible.

ADMINISTRATION.

The Alaska reindeer service is an integral part of the educational system of the Bureau of Education for northern and western Alaska. The district superintendents of schools are also the superintendents of the reindeer service; the teachers in charge of the United States public schools in the regions affected by the reindeer industry are ex officio local superintendents of the reindeer herds in the vicinity of their schools. The reindeer service is administered under the rules and regulations regarding the United States reindeer service in Alaska, approved by the Secretary of the Interior.

DISTRIBUTION.

The reindeer are distributed among the natives by a system of apprenticeship. At each station, promising and ambitious young natives are selected by the local superintendents as apprentices for a term of four years. In accordance with the rules and regulations, an apprentice receives 6, 8, and 10 reindeer at the close of the first, second, and third years, respectively, and 10 more at the close of the fourth year. Upon the satisfactory termination of his apprenticeship, an apprentice becomes a herder and assumes entire charge of his herd, subject to the rules and regulations. A herder must in turn employ and similarly distribute reindeer among his apprentices, thus becoming an additional factor in the extension of the enterprise. A native may also acquire reindeer by purchase from another native, upon condition that he will be governed by the provisions of the rules and regulations for the reindeer service.

A NATIVE INDUSTRY.

In order to make the natives preserve and accumulate the reindeer intrusted to them, and to preclude the possibility of the reindeer industry being taken from the natives, no native has been permitted to sell or otherwise dispose of female reindeer to any person other than a native of Alaska. Strict adherence to this fundamental principle of the Alaska reindeer service has built up for the natives of northern and western Alaska an industry which is especially adapted to them and affords them assured means of support. There is grave danger that granting to the natives permission to dispose of female reindeer to white men would, unless scrupulously safeguarded, rapidly deprive the natives of their reindeer and destroy this great native industry which is the result of 20 years of careful oversight and fostering care. It is possible that the removal of the restriction prohibiting the sale of female reindeer to white men might, with watchful guidance, result in making reindeer raising in Alaska and the exportation of reindeer meat and hides an industry of great commercial importance.

EXPENDITURES.

The appropriation for "Reindeer for Alaska" for the fiscal year ending June 30, 1913, was $5,000, which was expended in furnishing food, tents, and clothing to the apprentices (who during the four years of their apprenticeship are to a certain extent prevented from providing food for themselves by hunting and fishing), and in defraying the expenses of establishing herds in new locations, which include hiring guides, also providing food, tents, and camp equipment for the native herders employed to transfer the reindeer.

CHAPTER XXIX.

EDUCATION IN THE TERRITORIES AND OUTLYING POSSESSIONS.

CONTENTS.—Hawaii—Philippines—Canal Zone—Samoa—Guam.

HAWAII.

Area: 6,449 square miles. Population: 217,744.

(From the report of Gov. W. F. Frear, for the year 1912–13.)

The past two years have been of unusual importance in the school history of these islands, particularly because of enactments by the legislature of 1911 which placed the public schools largely on an automatic adequate financial basis and provided also for many new buildings. The new financial policy resulted in a large increase in the number of teachers and pupils and an increase in the average efficiency of the teachers in consequence of the payment of higher salaries.

During the past year there has been a still larger increase in the number of teachers, but, as was to be expected, not so large an increase in the number of pupils. Thus a much-desired reduction in the number of pupils per teacher has begun, this number being 38.03 now, as compared with 40.81 a year ago. The number contemplated ultimately by statute is 35.

There was expended during the year 1912–13 $677,799.72 for the maintenance of public schools, as compared with $630,334.65 during 1911–12 and $479,351.19 in 1910–11, which was just before the new financial policy was instituted. Of the $677,799.72 expended during the past year, $634,434.04 was expended by the Territory out of current revenues; $18,780.60 for overhead salaries and pay rolls, $569,334.05 for teachers' salaries, and $46,319.39 for other expenses, including school supplies, furniture, books for school libraries and for sale, equipment and material for industrial training, support of three industrial boarding schools, summer school, traveling expenses, etc.; and $43,365.68 was expended by the counties for the maintenance of school buildings and grounds. Thus the cost of maintenance of the public schools was $26.44 per pupil, as compared with $26.53 during the preceding year. The corresponding amounts expended during the preceding year for overhead charges, teachers' salaries, and other expenses by the Territory and for buildings and grounds by the

counties were $18,341.78, $497,525.43, $66,367.45, and $47,799.46, respectively, showing a substantial increase of $71,808.62 for teachers' salaries alone and a reduction in other expenses during the last year. These figures are exclusive of expenditures for the College of Hawaii, the cost of school sites, the expenses of schools in various institutions under the department of public health, and interest on the investment, which is about $2,000,000, in school buildings and grounds. Increased expenditures have been authorized for the ensuing biennial period for various items, among which special mention may be made of manual and vocational training.

The legislature of 1911 provided for new buildings chiefly out of loan funds, while that of 1913 provided for them chiefly out of current revenues. For this purpose there was appropriated for the last biennial period $371,000 out of loan funds and $6,000 out of current revenues and there has been appropriated for the ensuing biennial period $261,105 out of current revenues. The amount actually expended by the Territory during the past year for new buildings was $234,676.79, as compared with $92,577.92 during the preceding year. The amount expended by the counties for the same purpose during the past year was $34,064.99, as compared with $13,106.71 during the preceding year. Thus, the amount expended by both the Territory and the counties for new buildings was $268,741.78, which is larger than for any preceding year.

The entire amount expended for the public schools by the Territory and by the counties out of both loan funds and current revenues for both maintenance and new buildings, exclusive of sites, during the past year was $946,541.50, or at the rate of $36.93 per pupil, as compared with $722,912.57 ($30.43 per pupil) during 1911–12, and $483,594.60 ($23.48 per pupil) during 1910–11.

The number of all schools is 212, an increase of 5 for the year; of public schools 161, an increase of 5, as compared with an increase of 1 for the preceding year; of private schools 51, the same as for the preceding year. School accommodations have been increased far more by the erection of larger buildings than by an increase in the number of buildings.

The teachers in all schools number 986, an increase of 104 for the year; in public schools 674, an increase of 92, as compared with an increase of 59 for the preceding year; in private schools 312, an increase of 12. Of these, 238 are males and 748 are females. They are of many races, Americans leading with 472, followed by part-Hawaiians with 203, Hawaiians with 84, Portuguese with 65, British with 54, Chinese with 36, Japanese with 29, Germans with 17, and smaller numbers, aggregating 26, of other races.

The pupils in all schools number 32,938, an increase of 3,029 for the year; in public schools, 25,631, an increase of 1,879 as compared with

an increase of 3,155 for the preceding year; in private schools, 7,307, an increase of 1,150 as compared with an increase of 632 for the preceding year. During the two years under the new financial policy the number of pupils in the public schools has increased 5,034, or 24.44 per cent. During the 13 years of Territorial government the number of pupils in both public and private schools has increased from 15,537 to 32,938, or 112 per cent, while those in the public schools alone have increased from 11,501 to 25,631, or 123 per cent. Of the pupils in all schools, 17,889 are males and 15,049 are females. Those under 6 years and those over 15 years of age are disproportionately numerous in the private schools, while those from 6 to 13 years of age are disproportionately numerous in the public schools. More and more attention is given to laggards and promotions, with a resulting better distribution of pupils among the grades. The Japanese continue to furnish the largest increase in the pupils of any one race. The pupils of this race in all schools increased 1,692 during the year and from 1,352 to 10,990, or 9,638, during the 13 years of Territorial government, while all other pupils combined increased 1,337 during the past year, and from 14,185 to 21,948, or 7,763, during the 13 years. During the preceding year, however, the increase in Japanese was only 1,691 as compared with an increase of 2,096 in others. The Japanese lead with 10,990, or 33.37 per cent of the total; the Portuguese follow with 5,497, or 16.69 per cent; then come the Hawaiians with 4,390, or 13.02 per cent; the part-Hawaiians with 4,146, or 12.59 per cent; the Chinese, with 3,783, or 11.48 per cent; and all others with 4,232, or 12.85 per cent.

COLLEGE OF AGRICULTURE AND MECHANIC ARTS.

The past year has been the first during which the college has been in its permanent quarters, which consist of a large concrete building, two smaller wooden buildings used as chemical and electrical laboratories, and buildings for the dairy, poultry, and swine experiment station, all of which are situated on grounds covering 86.38 acres in the suburbs of Honolulu. The college has an astronomical observatory on a hill about 2 miles away.

Several members were added to the faculty. Owing to transfers of a number of students to colleges on the mainland, the number of regular students decreased from 28 to 24. The number of irregular students fell from 129 to 122, due probably to the removal of the college from near the center of the city into the suburbs. The graduating class numbered 5—namely, 3 in general science, 1 in agriculture, and 1 in engineering—as compared with 4 the preceding year, when the first class that entered the college graduated.

Special attention was paid to the work of the agricultural department, including dairying and animal industry. An effort is being

made to develop a high grade of corn peculiarly adapted to Hawaiian conditions. The college conducts an extension department, cooperates with the department of public instruction, and endeavors to keep in close touch with the community generally by disseminating useful information, assisting in the introduction of better breeds of animals and higher grades of agricultural products, and using its equipment in testing materials and in other ways.

LIBRARY OF HAWAII.

This library was opened last February in a handsome building constructed at a cost of $115,514.23, with an additional expenditure of $11,630.59 for furniture and fixtures, toward which Mr. Andrew Carnegie donated $100,000. Amalgamated with it are the libraries of the Honolulu Library and Reading Rooms Association and the Hawaiian Historical Society. The former contributed 17,878 volumes and the latter 1,325 volumes, besides valuable collections of Hawaiian pamphlets. The former also contributes about $4,000 annually for maintenance, and the Territorial legislature provides $10,000 annually for the same purpose. During the year 3,431 volumes were added to the library. The use made of the library has been far greater than was anticipated. During the five months there were drawn 33,951 volumes. A children's department is maintained, as well as a general reading room, and traveling libraries are sent regularly to 12 stations in different parts of the Territory. Provision was made by the last legislature for making the library at Hilo, which has just erected a new building at a cost of about $20,000, a branch of the Territorial library.

PUBLIC ARCHIVES.

These are kept in an absolutely fireproof building specially constructed for the purpose. The work of the librarian and assistants, under the direction of a commission, has consisted chiefly in collecting documents from many sources covering a period of more than a century, copying those that are fading, translating those that are in the Hawaiian language only, classifying and indexing them, binding many of them, and compiling statements on various subjects. Among other things, during the last year, the work of copying the privy council records of the monarchy was completed and the copies bound in 14 volumes. The translation of the journals of the house of representatives for the years 1851–1862 also was completed, so that now the entire legislative history of these islands, covering 73 years, is in English. Many of the documents contain valuable information in regard to land titles. The legislature at its recent session provided for the preparation of a new dictionary of the Hawaiian language under the direction of the archives commission.

THE PHILIPPINE ISLANDS, 1912-13.

[From the Thirteenth Annual Report of the Bureau of Education. By Frank R. White, director.]

GENERAL STATEMENT.

Excepting in the matter of school enrollment, a very steady and encouraging advance has been made during the past year. The standard of English instruction has been raised materially. The campaign for better school buildings and grounds has been continued vigorously and with most successful results. Industrial instruction has never been on a sounder basis than at present. The results speak for themselves. Further improvement in the American and Filipino personnel has been very marked. In no line of work has this improvement been more notable than in the increase of the efficiency of the administrative work of the bureau. The general office has issued a number of publications of importance; has conducted the most successful vacation assembly at Baguio in its history; and feels that it is in closer touch than ever before with its teaching force, both American and Filipino. Two special campaigns have been entered into which will be given detailed mention elsewhere in this report. The athletic program is pursued in such a way that a large percentage of the boys and girls enrolled in the public schools are receiving physical training in one form or another.

Changed conditions have resulted in constantly increasing demands upon appropriations, both municipal and insular, of the bureau of education, although there has been no corresponding increase in the total amount of money available. The total amount of money, exclusive of that furnished by the city of Manila, but including the municipal share of expenditures for construction, was, in 1909, $2,673,880; in 1910, $2,816,255; in 1911, $2,751,125; and in 1912, $2,741,500. These figures are for the municipal calendar year ending December 31 combined with the insular fiscal year ending June 30 of each year. It will be seen that with the ever-increasing demands on the bureau of education and no corresponding increase in appropriations, retrenchment in one of several directions was necessary.

The only logical relief obtainable was either through limiting to a considerable extent the amount of primary instruction by closing barrio schools, or by reducing the number of intermediate and secondary school pupils to the number enrolled during the school year 1909–10. The first was chosen for a number of reasons. In the first place. the country needed a large number of well-trained young men and women as teachers and workers along similar lines.

The schools to date have not been able to produce a sufficient number of this class. Moreover, the people who have had a voice in affairs have always been much more interested in intermediate and secondary instruction than in the extension of primary schools to the barrios. The director of education and his official superiors are constantly in receipt of letters protesting against the closing or demanding the opening of intermediate schools. During the past three years this bureau has received more than six times as many communications asking for an extension of intermediate instruction as for an extension of primary instruction. Representatives of the insular government traveling through the provinces are met with requests from every section for the extension of intermediate instruction. Their attention is very rarely indeed called to the desirability of extending primary instruction.

The action taken reduced the number of schools to a dangerously low minimum. The situation created was a serious one. However, the governor general, by an additional allotment to the bureau of education, made possible the opening of 1,000 new primary schools, in which it was desired to enroll at least 100,000 additional pupils at the opening of the 1913–14 school year. At this writing the approximate minimum increase has been secured, notwithstanding the fact that reports have not yet been received from a number of school divisions on account of normal institute sessions held at the beginning of the school year. The increased enrollment secured will greatly exceed the minimum figure desired.

This action provides a remedy for the decreased attendance in the public schools, but it does not in any sense relieve the pressure on the bureau of education caused by the promotion of large numbers of pupils from the lower to the higher grades in those schools which have been in operation for some time. This pressure is becoming so great that the bureau of education, in default of an increased appropriation, will in a short time be again compelled to choose between one of two alternatives: To reduce the total number of schools or to limit the amount of higher instruction given.

Although the total enrollment during the 1912–13 school year was only 440,050, as compared with 529,665 for the preceding year, the attendance increased from 83 to 87 per cent.

While it is very much to be regretted that public instruction has not been extended to every section of the islands, it is believed that the bureau of education has accomplished the maximum possible amount of good with the very limited funds at its disposition.

PERSONNEL.

Directors.—The directorate of the bureau remains the same as at the last report. Mr. Frank R. White, director of education, was absent during the greater part of the year. During that time the assistant director assumed the responsibilities of the position.

American teachers.—From the American teaching force there have been eliminated those teachers whose services for one reason or another have been unsatisfactory. This policy has been consistently followed for a number of years, as a result of which it would be difficult to find a more efficient force than that at present in the service of this bureau.

Only 85 new American teachers were appointed from the United States this year. This will result in a slight reduction in the American teaching force. The teachers secured have been almost without exception of splendid character and excellent preparation. This has been possible because of the greater interest taken in the service in the United States. Only a very few women teachers were employed, since they are not available for assignment to any except the larger centers of population.

Filipino teachers.—The total number of Filipino teachers on duty at the close of the school year was 7,013, of whom 1,154 received salaries from insular funds, 5,759 from municipal funds, and 100 were apprentice teachers without salary. The statistical tables accompanying the report, when compared with those of previous years, show great advancement in their average attainments and ability to teach. Applicants are no longer given regular municipal appointments unless they have completed at least the intermediate course. Of the total number of Filipino teachers, 3,522 have completed the intermediate course or better. Filipino teachers are assigned to positions of greater responsibility as rapidly as possible. At the present time the greatest need is for a number of well-qualified Filipino teachers to handle primary and intermediate work. It is through such experience that they will become fitted for work of an administrative nature. During the past year 115 were assigned to positions as supervising or assistant supervising teachers, which figure does not include 21 Filipino industrial supervisors.

OFFICE ORGANIZATION.

Under the present organization of the office the work is handled by six divisions: Accounting, building, property, records, academic, and industrial and publications. Increased efficiency is to be reported in handling the work of the general office.

The new academic division is in direct charge of official examinations, examines sample textbooks, handles details relative to courses

of study, and makes recommendations from time to time relative to instruction along academic lines and other similar subjects.

The accounting division has handled its work accurately and efficiently. The books of the office and those of the insular auditor are in exact adjustment within 30 days after the close of the fiscal year. Salaries and expense accounts have been paid promptly and to the satisfaction of the teaching force in general.

The records division has handled an increased volume of business during the past year with the same force of clerks, due to more systematic organization of the work of the division.

The property division has further simplified and perfected the work of allotting supplies, textbooks, etc. The stock in the storehouse has been overhauled and placed in first-class condition. The work has at all times been handled promptly and accurately.

The industrial and publications division has handled in a highly satisfactory manner an immense volume of publication work for the bureau during the year. It has kept in touch with industrial instruction throughout the islands and has contributed much to developing and perfecting industrial instruction.

The buildings division has, as heretofore, had general oversight of the construction of buildings and the acquisition of suitable school sites. The work has been handled very efficiently.

The marked general improvement in the efficiency of Filipino clerks is worthy of particular notice. They are assigned, as rapidly as they develop, to work involving greater responsibility. Filipino stenographers in particular are employed in increasing numbers.

LEGISLATION DURING THE PAST YEAR.

Act No. 2194 appropriates $26,875 for the improvement of the teachers' camp at Baguio, and $30,000 for school buildings in the non-Christian Provinces.

Act No. 2208 appropriates the sum of $126,850 for the conduct of schools in the non-Christian Provinces for the calendar year 1913.

Act No. 2218 appropriates the sum of $25,000 for the maintenance of the school of household industries at Manila.

Act No. 2219 appropriates $15,000 for the support of student pensionados in insular schools.

Act No. 2262 appropriates $25,000 for the construction of a schoolhouse to be known as the José Rizal School Building, to be built in the municipality of Calamba, Laguna.

Act No. 2264 appropriates $137,500 for the construction of buildings for the Philippine school of arts and trades, and $75,000 for aid in the construction of central school buildings.

No general appropriation act was passed by the legislature, and as a consequence the bureau of education, as well as other bureaus,

will depend for support on funds allotted by the governor general under authority given him by law to allot funds for the support of the Government in case of failure of the legislature to pass a general appropriation bill.

In addition to the appropriation acts enumerated above, the following directly affect the bureau of education:

Act No. 2198 authorizes the secretary of public instruction to make an allotment from the funds appropriated under the Gabaldon Act for the construction of a school on land belonging to the Government of the United States in the naval reservation at Olongapo, Zambales.

Act No. 2217 authorizes municipal councils to appropriate at the beginning of each year a certain part of school funds for the creation and maintenance of night schools in English.

Act No. 2249 gives to the governor general, on behalf of the Philippine Islands, and to municipalities and Provinces, the right to expropriate real property for public uses. This act confers on courts of first instance exclusive original jurisdiction in such cases.

Among the large number of acts passed during the year the following do not affect the bureau of education directly, but are of indirect interest to it:

Act No. 2225, appropriating the sum of $50,000 for the Philippine exposition to be held in the city of Manila during the year 1914. Such an exposition is authorized under the provisions of Act No. 2224.

Act No. 2226, appropriating the sum of $75,000 for the establishment and maintenance of stations for practical instruction in matters concerning agriculture and for a system of agricultural demonstration and development.

Act No. 2231, authorizing municipal councils under certain conditions to close municipal roads, streets, alleys, parks, or squares for governmental purposes.

Act No. 2238, providing for the revision and correction of land-tax assessments.

Act No. 2239, providing that until January 1, 1920, both English and Spanish under certain conditions shall be official languages.

Act No. 2253, appropriating the sum of $22,500 to provide for the creation of 20 scholarships in the Government forest school at Los Banos, for the maintenance of 33 scholarships already created, and for the salaries, traveling expenses, and equipment of graduates of the school.

Act No. 2259, providing for a cadastral survey, is one of the most important pieces of legislation of recent years.

Act No. 2260, appropriating the sum of $312,500 for the university of the Philippines for the fiscal year 1914.

COURSES OF STUDY.

A little more than a year ago committees were appointed to consider changes in the primary and intermediate courses of study. Their reports have been received and accepted by the director of education with very few changes. It has been found in the past that the work of most of the grades was greatly overcrowded. The changes made have been in the direction of simplification.

Conditions in this country demand early specialization. In the prescribed courses of study this specialization is introduced in the first year of the intermediate courses. Six courses are provided: The general course; the course for teaching; the course in farming; the trade course; the course in housekeeping and household arts; and the course in business. To delay specialization until the secondary course is reached would result in sending from the public schools the vast majority of the pupils without any special preparation to fit them for useful careers in the more or less humble stations in life to which the activities of the great majority of this or any other country must be confined.

A recent survey of the field discloses the fact that many intermediate schools offering the special courses have not been properly equipped with sites, buildings, and industrial equipment to give these courses effectively. During the past few months a thorough examination has been made into the organization of these schools with a view to ultimately closing them in case it is not possible to raise them to the standards set by this bureau.

It is planned to establish at least one school offering the course in farming in each division. Schools of this type must have at least 10 hectares of good land. Such schools are now in operation at Ballesteros, Cagayan; Batac, Ilocos Norte; Indang, Cavite; Tacloban, Leyte; Batangas, Batangas; and Iba, Zambales. In addition to these, the Central Luzon Agricultural School at Munoz, Nueva Ecija, offers more extensive instruction in agriculture.

There are 259 intermediate schools offering the general course, 96 the housekeeping and household arts course, 49 the teaching course, 40 the trade course, 6 the farming course, and 2 the course in business.

PUBLICATIONS.

A greater number of publications was issued during the past year than during any previous year. They are as follows:

Bulletin No. 44, Libraries for Philippine Public Schools.
Bulletin No. 45, The School of Household Industries.
Bulletin No. 46, The Industrial Museum, Library, and Exhibits of the Bureau of Education.

Bulletin No. 47, Good Manners and Right Conduct (for use in primary grades). (Although good manners and right conduct have been taught in the public schools for a number of years, it was found advisable to prepare a comprehensive bulletin to serve as a teacher's guide.)
Bulletin No. 51. The Phillipine School of Commerce. 1913.
Bulletin No. 52. The Philippine School of Arts and Trades, Nautical Department. 1913.
Bulletin No. 53. Elementary Course in Plain Sewing.
A Talk on Health Conditions in the Philippines. Dr. Victor G. Heiser, director of health.
Civico-Educational Lecture No. 8—Corn.
The Teachers' Assembly Herald (vol. No. 6).
The Twelfth Annual Report of the Director of Education.
Supplementary Problems for Trade Schools and Trades Classes in the Philippine Public Schools.
The Philippine Craftsman. (The first issue of this magazine was printed in July, 1912. It is published monthly during the school year. It is entirely industrial in nature, and by means of its wide circulation keeps even the more remote divisions in touch with all phases of industrial work. It has attracted favorable attention from prominent European and American educators.)

In addition to those enumerated above, the following textbooks, bulletins, etc., are in course of preparation and will be distributed in the near future:

Bulletin No. 31 (revised), School and Home Gardening.
Bulletin No. 40 (revised), Athletic Handbook.
Bulletin No. 48, A Course in Civics.
Bulletin No. 49, Philippine Industrial Fibers.
Bulletin No. 50, Arbor Day and School Holidays.
Economic Conditions in the Philippines.
Housekeeping—A Textbook for Girls in the Public Schools of the Philippine Islands.
Philippine Mats (reprint from the Philippine Craftsman).
The Philippine Craftsman (Vol. No. II).

BUILDINGS AND SITES.

The building program of the bureau of education may be summarized as follows:

Each barrio school must be provided with a site containing at least 5,000 square meters before the expenditure of insular funds for construction purposes will be authorized. For central schools the minimum is fixed at 10,000 square meters. Division superintendents are urged to require standard sites, even though there may be no very immediate prospect of erecting permanent school buildings thereon. Up to a maximum of $2,500, insular funds will be made available for the aid of municipalities in schoolhouse construction, on condition that they give half as much as the Insular Government.

Where permanent buildings can not be erected, school authorities are urged to erect satisfactory temporary buildings in accordance

with plans prepared by the general office. In all cases certain minimum requirements are laid down for temporary buildings to be occupied by public schools. The fixing of these requirements two years ago has greatly improved general school conditions throughout the islands.

Experience has shown that it is better policy to concentrate expenditures on the construction of larger central school buildings than on a number of one or two room barrio buildings, housing only a limited number of pupils, but costing more per classroom.

There are now in the islands 1,032 standard school sites, of which 643 are of 5,000 to 10,000 square meters in size, and 389 are 10,000 square meters or more in extent. Of this total number, 311 barrio school sites and 252 central school sites were secured during the past fiscal year. During the previous fiscal year 203 standard barrio school sites and 41 central school sites were secured. These figures show that in the past two years 78.2 per cent of the total number of standard school sites have been secured as a result of the activities of division superintendents, supervising teachers, and municipal officials.

During the past year 111 standard-plan schoolhouses have been completed, containing 435 classrooms and providing ample accommodations for approximately 21,750 pupils. This brings the total number of standard-plan school buildings constructed since the passage of the original Gabaldon Act up to 180, containing 665 classrooms.

The governmental agencies responsible for construction work are better organized and equipped than ever before. The bureau of public works is to be commended for greatly increased efficiency in handling a very difficult situation. The policy of using competent Filipinos for the supervision of schoolhouse construction has been inaugurated during the past year, and has considerably lowered the cost of building work. The bureau of supply has on hand a large supply of dimension lumber and other materials sufficient to fill promptly requisitions for building materials. This has also materially reduced the cost of construction. In the past, when materials were not delivered promptly, construction gangs have been left without work, thus increasing the cost of buildings.

At the time of writing this report work is progressing rapidly on the new building for the girls' dormitory of the Philippine Normal School. Funds have been made available for the necessary building for the Philippine School of Arts and Trades on a site adjacent to that of the Philippine Normal School.

INSULAR SCHOOLS.

Under the head of insular schools are included those which depend entirely upon the Insular Government for support. It should be remembered in this connection that all other schools are either pro-

vincial or municipal in character, although they may receive aid from the Insular Government.

The Philippine Normal School, the Philippine School of Arts and Trades, the School of Household Industries, the Philippine School of Commerce, and the School for Deaf and Blind are insular schools. In addition to these is a girls' dormitory, supported directly by the bureau of education. The Insular Government also bears the entire expense of supporting insular student and teacher pensionados in the Philippine Normal School, the Philippine School of Arts and Trades, and in the college of agriculture of the University of the Philippines.

The Philippine Normal School.—The course of study of the Philippine Normal School provides for instruction in the subject matter of the public-school curriculum and, in addition, offers such professional training as will best fit those in attendance for service as teachers. The academic departments embrace four years' work after the completion of the intermediate course. Particular attention is given to the teaching of English in all of the four years of the course.

The industrial department gives instruction in lacemaking, housekeeping and household arts, embroidery, Irish crocheting, hat weaving, matting, macrame, textile weaving, and bamboo furniture. Two years' work in this department is required of every candidate for graduation. The course in housekeeping and household arts prepares young women for teaching domestic science in primary and intermediate schools. The boys are required to take a course in school and home gardening, which includes a limited amount of actual work in the normal-school garden.

All candidates for graduation are required to teach one class a day for two years. This teaching embraces all subjects of the primary and intermediate grades; 120 student teachers are in charge of training classes each day, their work being directed by 10 critic teachers. Of those who graduated from the normal school during the last three years, 97 per cent have entered the teaching service. So far not one has abandoned his profession. A few have obtained leave of absence in order to continue their studies in the University of the Philippines.

In June, 1913, the school opened with a total enrollment of 1,400, of whom 690 were enrolled in the regular normal-school work, leaving an attendance of 770 in the training department. The present faculty consists of 24 American and 22 Filipino teachers.

This school now occupies a new concrete building on Taft Avenue, the total cost of which was $224,500. Considerable work has been done in improving the school grounds and in laying out baseball and other athletic fields. Work has been begun on the new girls' dormitory adjacent to the normal school buildings. This will cost $147,500.

The Philippine School of Arts and Trades.—It has been necessary during the past year to turn away a number of applicants for admission, on account of a lack of adequate facilities for handling all candidates. The sum of $237,500 is available for the construction of buildings for this school, the completion of which will permit of the handling of a larger number of students and of the establishment of new courses without adding materially to the expense of conducting the school. The total number of pupils enrolled during the 1912–13 school year was 601, an increase of 47 over the preceding year. A school library containing 1,016 volumes has been established during the year. A school restaurant, costing the Government nothing for maintenance, has been in successful operation. Wholesome foods were sold at cost. Although no effort has been made to increase the amount of commercial work, the figures for the 1912–13 school year show an increase of $6,478.12 over those for the preceding year, the total for the year being $23,045.34.

Thirty-four students graduated from the school during the school year 1911–12. Of these, 33 are engaged in work directly or indirectly connected with the courses they pursued in the school, while 1 is taking higher work in another school. In adition to the graduates, 35 nongraduates secured positions.

On request of the Shipowners' Association, it was decided to establish a nautical department in connection with this school. This department was opened at the beginning of the school year in 1913, the enrollment being limited to 40 pupils. Applicants must be over 18 years of age; have completed at least the intermediate course of study; and signify their intention to follow seamanship as a profession after graduation. Instructors for the academic work in this department were chosen from the faculty of the school. Two experienced officers have been assigned by the director of navigation to part-time work, teaching practical seamanship and navigation in the school. The first two years of the course are to be spent at the school, with the exception of the first long vacation, which is to be spent on board inter-island vessels. At the close of the second year, the pupils will be distributed among the various inter-island vessels for 18 months' practical instruction on board ship, during which period they will receive an allowance of $7.50 per month, in addition to food and quarters. The Shipowners' Association has signed an agreement to use its best efforts to give permanent employment at suitable remuneration to pupils completing the course of study and the prescribed apprenticeship on board vessels.

The Philippine School of Commerce.—The enrollment in the Philippine School of Commerce shows a continuous upward trend in the number of well-trained pupils matriculating. Out of a total enrollment of 392, there were 31 high-school graduates and 321 possessing

certain secondary credits. In order to make room for the increasing number of advanced pupils, seventh-grade classes were discontinued at the end of March, 1913.

Pupils were enrolled from 32 Provinces. Reports indicate that 123 pupils were enrolled in the bookkeeping course, 24 in the four-year course in commerce, 40 in the intermediate business course, 174 in the two-year stenography course, and 31 in the one-year stenography course.

The School for Deaf and Blind.—The School for Deaf and Blind, as well as the Philippine School of Commerce, is for administrative purposes placed under the direction of the superintendent of the Manila city schools. The work is handled by an American principal and four Filipino assistants. The total enrollment during the past school year was 46, collected from the city of Manila and the various Provinces.

The School of Household Industries.—At the time of writing this report the School of Household Industries has completed the first year of its existence. The purpose of this school is to train adult women in certain selected home industries, particularly embroidery and lacemaking. At the time of matriculation candidates must agree to return to their home towns after graduation to establish local classes for instruction, with the idea of employing such students as assistants at fair wages when they have become sufficiently skilled. Very superior work has been done by this school, and it has attracted general favorable attention from authorities familiar with these lines of work.

PENSIONADOS IN INSULAR SCHOOLS.

When public schools were first opened in the Philippines after the American occupation it was found that there were very few Filipino teachers properly qualified to do the work required of them. The educational standard required of teachers was raised as rapidly as conditions would permit. It soon became apparent, however, that unless some extraordinary measures were taken the teaching force could not be improved as rapidly as desired. As a result, scholarships were provided by law for students and teachers who would agree to return to their respective Provinces and engage in teaching for a period equal to that during which they enjoyed such scholarships. These pensionados receive traveling expenses to and from Manila and an allowance sufficient to meet their living expenses while actually in school.

The number of pensionados of both classes is approximately 240. They are assigned to the Philippine Normal School, the Philippine School of Arts and Trades, and to the College of Agriculture at Los

Banos. Teacher pensionados ordinarily are permitted to remain for only a single year. Student pensionados may ordinarily remain for a two-year period. The improvement in the teaching force as a result of this system has been so marked that it is recommended for continuance.

SCHOOLS FOR NONCHRISTIANS.

The legislative function for the Provinces of Nueva Viscaya, Agusan, and the Mountain Province is performed by the Philippine Commission. The presence of a large number of non-Christians in them makes necessary the establishment of a special form of government and gives rise to the name "non-Christian Provinces." The bureau of education must therefore look to the Philippine Commission for the funds to carry on educational work in these Provinces. Only a few of the towns and settlements have municipal school funds, so that practically all of the money for the support of the schools must come from the Insular government. Substantial progress has been made in all of these divisions.

ATHLETICS.

Progress in the development of athletics and physical training during the past year has been very great. Particular attention has been given to the further development of group games and other forms of play in which the great majority of the pupils can advantageously participate. The percentage of pupils participating in atheletics is very high, although no accurate figures are yet available. This has been accomplished without detracting in the slightest from the attention given to the specialized form of athletics. Practically every interscholastic record was broken at the last interscholastic meet held in connection with the Philippine Carnival. In baseball, basket ball, and similar sports the progress has been just as notable.

During the past year two separate contests were held to determine the award of certain prizes donated by Gov. Gen. W. Cameron Forbes. A basket-ball outfit was given to the school in each division containing the highest percentage of pupils qualifying in a three-event athletic competition. Although this was a new contest in most divisions, the interest and rivalry were very keen. A volley-ball outfit was awarded to the school in each division winning the championship in group athletic contests. This contest also aroused much interest and secured very beneficial results.

In connection with the Philippine Carnival, held in Manila February 1 to 9, inclusive, a Far-Eastern Olympiad was held, in which China, Japan, and the Philippines took part. The organization of the Far-Eastern Olympiad was due to the initiative of the Philippine amateur athletic federation, with which the bureau of education is

affiliated. The majority of the contestants representing the Philippines were school boys. In track, field, and general athletic events the Philippines were victorious. Japan won the baseball championship. It is difficult to overestimate the significance of this series of games. It may be truthfully said that athletics in the public schools made such an international contest possible.

The very marked improvement noticeable in the spirit of sportsmanship of both teachers and pupils is very pleasing. Only one or two instances have been reported during the year of teachers who failed to conduct themselves in a sportsmanlike manner at athletic contests. It is the intention of this office to terminate the connection of any teacher with athletic management who is guilty of rude and unsportsmanlike deportment at any athletic meet.

THE PLAYGROUND MOVEMENT.

By fixing the standard size of barrio schoolhouse sites at 5,000 square meters, and that for central schools at 10,000 square meters, provision is made for an ample playground in connection with each school. The extent of the playground movement in the Philippines is indicated by the number of standard school sites required. On April 1, 1913, there were 1,032 standard school sites, of which 244 were secured during the school year 1911–12 and 563 during the school year 1912–13.

In the bureau of education there are 39 schools that are provincial in character, 36 of which are provincial high schools. These schools are practically all located on sites large enough to furnish ample playgrounds. A baseball field, a quarter-mile running track, and courts for group games are found in connection with the majority of these schools. Twenty-eight of them are supplied with baseball grounds belonging to the school plant; 21 have running tracks; 12 have inclosed athletic fields; and 8 are supplied with grand stands.

TEACHERS' VACATION ASSEMBLY AT BAGUIO.

Teachers' Camp, located at Baguio, offers to American and Filipino teachers an opportunity to spend the long vacation during the heated period in most congenial surroundings, where opportunities are given for participation in conferences, in athletics and other amusements, and in social intercourse with their fellows.

The past year was the best in the history of this institution. During the season the total number of visitors, exclusive of children, reached 437, as compared with 395 during the previous year. The number of Filipino teachers in attendance was much larger than heretofore, the total being 89. It is hoped that this number will be materially increased next year. It is the aim of the bureau to secure

the attendance of the best qualified Filipino teachers, who will be able to take advantage of the opportunities offered by lectures and special courses.

During the vacation assembly of this year the teachers present benefited greatly by the presence of two noted educators from the United States—Dr. Paul Monroe, head of the department of education, Columbia University, and Dr. Edwin A. Schell, president of the Iowa Wesleyan University. Dr. Monroe arrived in the islands the latter part of the month of February and spent the interval between that time and the closing of schools during the last week of March in the most thorough possible investigation of the school system. He participated at Baguio in conferences with the directors, division superintendents, and teachers on educational conditions in the islands, and delivered a number of lectures during the earlier part of the assembly. His comments and criticisms on conditions from the standpoint of an educational specialist were of great value. Dr. Schell's lectures were delivered during the latter part of the assembly, on literary and ethical subjects of great interest and educational value to the teachers in attendance. The large and enthusiastic attendance at all these lectures was in itself sufficient proof of the high appreciation in which they were held by the residents of the camp.

Undoubtedly the most important feature of the vacation assembly is the conferences, presided over by the director of education, at which American and Filipino teachers are given an opportunity to express themselves on matters concerning the work of the bureau of education, and more definitely to inform themselves of the policy of the director of education.

VACATION ASSEMBLIES AT OTHER POINTS.

The vacation assembly for Filipino teachers was held at the Philippine Normal School from April 15 to May 24, 1913. Thirty-six school divisions sent a total enrollment of 1,109 students. Classes were held at the same time in the Philippine School of Arts and Trades, and were attended by 198 students from 31 school divisions. The work done in these assemblies was of a high order. However, it is believed that in the future the attendance should be limited to the most advanced teachers, who could be given courses in school administration and management, tending to fit them for positions as principals of central and intermediate schools, and as supervising and assistant supervising teachers.

Normal institutes or vacation assemblies were held for the instruction of teachers in every school division, except in those school divisions near Manila, the teachers of which may easily attend the

vacation assembly at the insular schools in Manila. Twenty-four divisions held vacation assemblies during the long vacation, or normal institutes immediately after the beginning of school.

SPECIAL FEATURES, SCHOOL YEAR 1912–13.

The corn campaign.—The corn campaign conducted by the bureau of education was the most important of the special features of the work of the past school year. Two contests were arranged, one for the production of the best ears of corn, and the other for the production of the most corn on a given area. In addition to this, demonstrations were given in practically all of the municipalities of the islands in the use of corn as a human food. This campaign received the enthusiastic support of the people and officials alike, and has resulted in an immense amount of good in disseminating knowledge of the most advanced methods of corn production, and the use of corn as human food. The final exhibit was held in Manila during the 1913 carnival, and consisted of a display of corn from practically all Provinces, and daily demonstrations in the preparation and serving of corn foods.

One of the main purposes of this campaign was to impress upon the Filipino the fact that corn is a food for human consumption. It was also hoped that the campaign would result in increasing the cultivation of corn. The campaign will be continued for the present school year with the additional feature of teaching the pupil to cultivate his plat of ground the entire year, either with corn alone or by the addition of legumes.

Some idea of the extent of this campaign can be gained from the fact that 30,327 boys were enrolled in the contests; 6,660 girls were taught corn recipes; 235 demonstrations were held; and 247,048 people were served. Approximately one-half million people attended the demonstrations. The recipes used call for the use of utensils and ingredients found in the average Filipino home.

Arbor Day.—Reports show that during the past year 330,795 trees or shrubs were planted by the children of the public schools, 208,746 of which were reported to be alive and in good condition at the end of the year. In the past the percentage of trees surviving has been low, due largely to the fact that they were not adequately protected by fences. The attention given by the bureau to the proper fencing of school sites will do much to remedy this condition of affairs.

Civico-educational lectures.—Although considerable good has been accomplished, the results secured by giving civico-educational lectures in compliance with Act No. 1829 have never been entirely satisfactory. The reports for the past year indicate that approximately 522,474 people attended the lectures. They were given in the native

dialects, and on the following subjects: Rights and duties of citizens; housing of public schools; the prevention of disease; diseases of animals; rice culture; coconuts; coconut beetles; and corn.

Collection of Local Geographic Material.—In order to furnish teachers in the public schools information of value in teaching local geography, all division superintendents were requested to prepare certain geographical notes covering their respective provinces. This work is nearing completion and when finished will constitute a valuable body of information which it is hoped will be productive of very material improvement in local geography instruction.

INDUSTRIAL INSTRUCTION.

The program of industrial instruction for the public schools has been carefully worked out and includes most of the important Philippine industrial activities. It covers seven years of work—the four years of the primary course and the three years of the intermediate courses—and provides instruction in agriculture, domestic science, needlework in its various forms, weaving of Philippine fibers, and work in wood, iron, and clay. No pupil passes through the primary and intermediate grades without some industrial instruction. In general it may be said that the industrial work of the two lower primary grades consists of weaving for both boys and girls, sewing for the girls, and gardening for the larger boys. Work along similar lines is further developed in the last two years' work of the primary grades.

Specialization is begun at once in the intermediate grades. Six courses are provided: The general course, the course for teaching, the course in farming, the trade course, the course in housekeeping and household arts, and the course in business. The general course, although it is more purely academic than the others, provides for industrial work in every grade.

Under the direction of the division superintendents of schools, 736 teachers give their entire time to industrial work. Of these, 32 are division industrial supervisors and assistants, 115 are domestic-science teachers, 101 are trade school and shop teachers, and the remainder are instructors in the various lines of handicraft. In addition, several hundred other teachers give part of their time and attention to industrial instruction. As a result of this organization, every school in the Philippines, except the 37 schools offering secondary instruction, gives industrial work in one form or another. The results secured by the consistent following of the industrial program during the past three years are most satisfactory. The quality of the work is improving very rapidly. The following figures give some idea of the extent of this instruction:

For the school year 1911–12, 91 per cent of the February monthly enrollment of pupils were doing some form of industrial work. During the past year stricter compliance with the requirements has brought this percentage up to 93. A portion of the 7 per cent not engaged in industrial work is found in the secondary grades. The remainder represents the lowest grades for which work has not yet been provided. This means that practically every pupil in the primary and intermediate grades is learning under intelligent direction to do something with his hands.

An examination of the statistical tables of this report will show that 19,958 boys were taking the trade and shop work; that 100,648 boys were engaged in gardening and farming; that 12,969 girls were taking the gardening work; and that 83,193 girls were studying housekeeping and household arts. Among other crafts and industries, 12,993 girls were learning lacemaking, 12,625 embroidery, 6,600 cooking, 10,456 boys and 3,031 girls were making hats, 29,527 pupils were studying matmaking, and 73,835 were working on baskets.

Of particular interest is the showing made in the extension of gardening from the schools to the homes of the people. Three years ago, with the exception of one or two provinces where this work had its first start, home gardens were practically unknown. For the school year 1911–12, 22,958 home gardens were reported, about two and one-half times the number reported for the preceding year. The 1912–13 school year shows a further increase of 50 per cent over the above number, or 35,719 gardens cultivated by pupils themselves at their own homes, and modeled closely after the plats which they worked in the school gardens. There were 2,310 school gardens during the past school year, practically the same number as for the preceding year.

Without question, the garden feature of the school program is largely responsible for the marked improvement in the quality and quantity of fresh vegetables now available in the public markets all over the islands. This work logically leads up to the course in farming, which this bureau is endeavoring to establish in at least one farm school of approved size (10 hectares) in each province.

The number of provincial trade schools has been increased from 5 in March, 1909, to 18 in June, 1913. In addition to these standard trade schools, in which 1,211 pupils were enrolled, there were 121 intermediate school shops, in which 832 pupils took the regular trade course, and 2,620 other pupils received some instruction in woodworking during the school year 1912–13. Twenty-three of these shops are equipped with woodworking machinery. As soon as a pupil has attained a certain degree of skill, he is permitted to do commercial work and to receive pay for it. Work of this character to the value of $87,841.57 was produced in these schools during the year, approximately $17,568.31 of which was received by the pupils as compensa-

tion for their labor. In addition to these figures, the primary shops turned out commercial work to the value of $15,185.47.

The eighth annual exhibition of the industrial work of the public schools was held in connection with the Philippine carnival in Manila from February 1 to 9, 1913. About 23,305 units of work, worth $28,591.62, were displayed, as compared with 16,362 units, worth $17,209.34, for the preceding year. Of this exhibit, $20,056.76 worth was sold, as compared with $12,888.54 sold the preceding year. This exhibit not only gave to the thousands of people who saw it an idea of the industrial work done by the public schools, but also gave to many Filipinos their first definite idea of the industrial and agricultural possibilities of their country. The profits of this work, a large part of which went to the pupils themselves, will further serve the purpose of showing them where they may direct their energies most profitably.

Statistics furnished this office by the insular collector of customs show that during the fiscal year 1911 embroideries to the value of $99,866 were exported from the Philippines. This was increased to $127,500 in 1912 and to $195,455 during the fiscal year 1913. It is believed that the instruction given by the bureau of education has contributed to this noteworthy increase.

During the year two lines of investigation worthy of special mention have been carried on. Much work has been done in the selection of typical Philippine designs, which will be applied to articles produced from materials grown in the Philippines. Foreign designs will be followed for the most part in needlework, with the possible exception of that in piña and jusi. A large body of information has been collected from various sources relative to opportunities in various industries, which will be used by the bureau in advising pupils of the lines of work they might profitably pursue during and after their school courses. The work accomplished here follows in a general way that of those giving attention to vocational guidance in the large cities of the United States.

The bureau of education each year is developing a large number of boys and girls who are sufficiently skilled to make articles having a commercial value. It will not be possible, however, for them to reap the fullest advantages of their skill and labor until there is a more thorough industrial sales organization than at present. It is imperative that all workers find a ready sale for their products. Cash payments are essential. The articles must be bought where produced. The bureau of education has given all possible attention to this question. Its final solution, however, is the logical duty of other governmental agencies and of commercial firms. The bureau of education can not follow up all pupils who have become skilled as industrial workers, either to advise them of prevailing market de-

mands and prices, or to assure them of ready cash sales for all marketable articles produced. As soon as the industrial sales organization has been extended to all sections of the islands, so that workers may be assured of reliable cash markets, the country will begin to realize fully on the industrial instruction given. There will be tremendous activity along industrial lines as soon as sales facilities adapted to the necessities of the people have been generally provided.

The corn campaign, which is given detailed mention under the heading "Special features, school year 1912–13," is a part of the general scheme for industrial education. The Philippine Craftsman is also a product of the industrial activities of this bureau.

STATISTICS OF PHILIPPINE SCHOOLS.

2,595 primary schools.
296 intermediate schools.
43 high schools.
215 primary school shops.
121 intermediate school shops.
40 provincial and manual training schools.

1 school of household industries.
1 school for deaf and blind.
1 school of commerce.
1 insular trade school.

1 normal school.
1 university.

College of liberal arts.
College of veterinary science.
College of agriculture, with a school of forestry.
College of law.
College of engineering.
College of medicine and surgery, with a course in pharmacy.

School of fine arts.

Enrollment.

Classes.	Male.	Female.	Total.
Primary	194,512	121,551	316,063
Intermediate	21,840	6,798	28,638
Secondary	4,005	748	4,753
Total	220,357	129,097	349,454

Proportion of male to female, 3 to 2.

Promotions.

Primary.		Intermediate.		Secondary.	
I to II	59,394	V to VI	9,473	1st to 2d	1,473
II to III	36,100	VI to VII	6,738	2d to 3d	746
III to IV	23,650	VII to 1st year	4,695	3d to 4th	453
IV to V	15,040			From 4th	342

Teachers.

	American.	Filipino.			Total.
		Insular.	Municipal.	Apprentices.	
Primary	15	366	5,219	45	5,645
Intermediate	166	383	211	52	812
Secondary	153	3	1		157
Industrial classroom	76	271	323	3	673
Industrial supervisors	42	21			63
Supervisors	206	110	5		321
Total	658	1,154	5,759	100	7,671

Executives.

1 director of education.
2 assistant directors.
40 division superintendents.
384 supervisors.

Pupils engaged in industrial work.

Hand weaving	138,405	Manual training	17,519
Loom weaving	1,800	Gardening	108,613
Fiber work	47,535	Farming	5,405
Housekeeping and household arts	89,685	Pottery	1,073
Trades	2,712	Miscellaneous	17,662

Commercial value of industrial work.

Insular trade school	$23,045.34	Intermediate-school shops	$12,843.84
Provincial trade schools	74,997.74	Primary-school shops	15,185.48

Bureau of education annual industrial exhibition.

	Number of articles.	Value.
Exhibited	23,305	$28,591.62
Sold	17,464	20,056.77
Returned	5,825	8,534.86
Portion of total value due Government		$10,788.83
Portion of total value due pupils	17,802.79	

Expended for schools during fiscal year 1913—insular, provincial, and municipal—exclusive of appropriations for schoolhouse construction, $3,130,915.68.

Appropriated for schoolhouse construction to June 30, 1913—$2,729,225.81.

CANAL ZONE.

When the United States Government in 1904 secured sovereignty over the strip of land on the Isthmus of Panama now known as the Canal Zone, the local government established by the Americans faced a problem which was undoubtedly unique in educational annals.

Previous to the American occupation of the Canal Zone territory no effort had been made to organize a system of schools in the interior towns of the Isthmus. The children had grown up in ignorance, except for the little instruction a few of them picked up at home. The laborers imported by the French Canal Company did open a few

schools, taught by Jamaican colored men, but the equipment was so meager, the housing facilities so inadequate, and the teaching force so incompetent that this move can be considered as but a very small step toward the growth of a school system.

With the advent of the Americans, however, a new impetus was given to education in the Canal Zone. The organization of a canal working force brought a large number of Americans and even more colored West Indian laborers to the Isthmus who demanded provision for the education of their children. This demand was not easily met in the first stages of the American occupation of the Canal Zone. The difficulties experienced in endeavoring properly to care for the growing working force so completely absorbed the attention and energy of the authorities that no satisfactory progress was made toward the establishment of an efficient school system. Then, too, because of the lack of housing accommodations and the beliefs prevalent in the United States as to the unhealthful conditions on the Isthmus, it was almost impossible to procure women teachers. To retain men teachers was out of the question; once on the Zone, men could obtain employment at work yielding practically double the remuneration offered for teaching. Long delays occurred before proper equipment and textbooks could be secured. So that the school system of the Canal Zone, which was authorized to be established in 1904, opened its first free public schools under the authority of the Canal Zone Government on January 2, 1906, and did not, in fact, become established on a sound basis with proper equipment and a good teaching force until 1908. The schools started in 1906 with 18 schools and an enrollment of 840 pupils; in 1907 there were 30 schools, with an enrollment of 1,741, and in 1908 there were 25 schools, with an enrollment of 2,867 pupils. Of these 25 schools, 11 were for white and 14 for colored children.

The largest problem, after the school system had once been established, was in the organization of a course of study, the supervision of instruction, and the grading of pupils—questions which in the life of a school system like that on the Canal Zone necessarily come later than the erection of buildings and the provision of teachers and supplies. The system of instruction, which at first was essentially of an individual character, was soon changed to class instruction. In similar grades in the schools throughout the Zone, uniform instruction in all subjects was provided. This was necessary, not only on account of the increase in enrollment, but chiefly because of the great amount of enforced moving from one part of the Canal Zone to another. Employees on the canal work were shifted continually from point to point, resulting in a constant transfer of pupils. Indeed, it often happened that a pupil, during a single school year, attended three and sometimes four different schools.

In order to keep informed of the pupils who passed from one school to another during a term, and in order to look after their best interests upon their entrance to the new school, a system of triplicate transfer slips was adopted. Teachers were thus advised when a pupil might be expected to enter another school and were informed of his aptitudes and weaknesses in the studies. In order at all times to keep these pupils properly graded, individual instruction was provided, for which two teachers devoted the major portion of their time. These teachers also gave individual instruction to other pupils who were somewhat behind in their work or who gave promise of being able with assistance to go into an advanced grade. The number of cases where children needed personal attention has continued to increase until at present individual instruction has become an integral part of the school system in the zone.

The rapid grading of pupils was made particularly difficult by the great difference in the previous preparation of the pupils attending the zone schools. To illustrate this, it may be well to give a statement of the school systems which contributed to the instruction of pupils before they entered the zone schools. The following classification was made up from statistics obtained in March, 1909:

States and countries in which the Canal Zone children had received instruction.

WHITE CHILDREN.

From schools in—	Pupils.
Alabama	11
Arizona	1
Arkansas	5
California	8
Colorado	3
Connecticut	4
District of Columbia	36
Florida	8
Georgia	8
Illinois	37
Indiana	10
Iowa	27
Kansas	6
Kentucky	20
Louisiana	7
Maine	4
Maryland	11
Massachusetts	25
Michigan	17
Minnesota	7
Mississippi	7
Missouri	11
Nebraska	9
New Jersey	12
New Mexico	4
New York	70
North Carolina	1
Ohio	38
Oklahoma	5
Pennsylvania	58
South Carolina	4
South Dakota	2
Tennessee	5
Texas	23
Vermont	4
Virginia	15
Washington	2
Wisconsin	7
Foreign countries:	
Denmark	1
Nicaragua	1
Holland	3
England	23
Germany	15
Jamaica	11
Spain	16
Panama	32
Costa Rica	2
Greece	1
Nova Scotia	1
Colombia	4
Guatemala	3
Ireland	1
Cuba	7
France	9
Finland	1
Syria	2
Hungary	2
Scotland	1
Central America	3
Unknown nationality	6
Nationality not stated	16
Pupils never having attended school prior to coming to the Isthmus	31

COLORED CHILDREN.

From schools in—	Pupils.
Colorado	2
Iowa	1
New York	5
Ohio	2
Pennsylvania	1
Texas	1
American born, States unnamed	6
Foreign countries:	
Brazil	2
British Honduras	1
Colombia	96
Costa Rica	6
Cuba	1
Martinique	13
Guadeloupe	1
Assyria	1
Italy	2
Nicaragua:	
Negroes	1
Nicaraguans	1
Panama	357
Spain:	
Native born	19
Spanish origin	28
Venezuela	1
Unknown nationality	59
British possessions:	
Barbados	61
Demerara	5
Antigua	5
Grenada	24
Jamaica	415
St. Lucia	73
Monserrat	3
St. Kitts	1
St. Vincent	2
Trinidad	9
Turks Island	1

The work of public instruction was gradually developed and systematized until at present, despite the problems—new in educational activities—which had to be overcome, the school system in operation in the Canal Zone may be considered an efficient one. The course of study for both the white and colored grade schools embraces the following subjects: Arithmetic, calisthenics, drawing, English, geography, history, music, language, reading, writing.

A secondary or high-school course is also provided for white children. This advanced course includes four years of Latin, three of French, and three of German, 54 weeks in mathematics, three years of science, three of history, four of English, and two years of Spanish. From this four-year course two pupils were graduated in 1911, five in 1912, and seven in June, 1913.

An experiment in the operation of gardens was inaugurated in 1908 in connection with some of the schools for colored children. These gardens, devoted to both decorative plants and vegetables, and conducted in small plots of land adjoining the schools, are cared for entirely by the pupils under the guidance of a horticulturist.

Free textbooks and stationery are provided at all schools and free medical treatment of the pupils is furnished by the Government. In addition, where children live at distant points they are transported to and from school by wagon and railroad without cost to the parents.

The following table indicates the extent of school work in the Canal Zone since the schools were installed:

Schools, teachers, and pupils in the Canal Zone.[1]

Beginning of term, Oct. 1—	Number of pupils.			Number of teachers.			Number of schools.		
	Total.	In white schools.	In colored schools.	Total.	For white schools.	For colored schools.	Total.	For white children.	For colored children.
1906	840	.....	.....	21	.....	.....	18	.....	.....
1907	1,741	176	1,565	30	.....	.....	30	.....	.....
1908	2,867	721	2,146	43	23	20	25	11	14
1909	1,812	745	1,067	58	37	21	27	11	16
1910	1,837	931	906	61	37	24	24	9	15
1911	1,979	1,076	903	67	43	24	26	11	15
1912	2,199	1,157	1,042	76	48	28	28	13	15

[1] Figures for 1912 and 1911 show actual enrollment; those for previous years, gross enrollment without deductions for pupils who enrolled in a number of schools during the term.

In June, 1913, there were 16 schools for white children, with a net enrollment of 1,369, and 15 schools for colored children, with a net enrollment of 1,580 pupils.

The supervisory and teaching force consists at present of a superintendent, a supervisor of upper grades and colored schools, a supervisor of primary grades, a principal of high schools, and 47 teachers for white schools and 32 teachers for colored schools. With the exception of the superintendent, the supervisor of upper grades and colored schools, and the principal of the high school, the teaching force for white schools is composed entirely of white American women. These, in nearly all cases, have completed a certified high-school course with two years of normal or college training, and have had at least two years' successful experience before coming to the zone. The schools for colored children are taught by colored men from Jamaica, who received their education in the best institutions of the West India Islands.

The Canal Zone school year extends from October 1 to June 30, with the following intermissions: Saturdays and Sundays of each week; Thanksgiving Day and the Friday following; December 21 to January 5, inclusive; Washington's Birthday; the week preceding Easter; and Decoration Day.

It should be stated here, however, that the Canal Zone school system will henceforth undergo a steady shrinkage. The year just completed may safely be said to have witnessed the high-water mark of the school work. The reduction and the imminent abolition of the canal construction force and the substitution of the smaller permanent canal operating force will cause a diminishing school population. It is difficult at this time to anticipate with accuracy the system and extent of public instruction in the Canal Zone which will remain after the completion of the canal, but if the population of the zone is restricted to the canal operating force, which is probable, not more than a half dozen schools will be required in the zone.

Tables giving additional information are appended.

Canal Zone schools—Monthly enrollment and average daily attendance.

Months.	White schools.		Colored schools.	
	Monthly enrollment.	Average daily attendance.	Monthly enrollment.	Average daily attendance.
1912.				
October	1,157	1,031.1	1,042	748.5
November	1,202	1,029.9	1,130	742.6
December	1,241	1,025.0	1,165	780.5
1913.				
January	1,301	1,050.3	1,364	786.7
February	1,319	1,046.6	1,417	809.6
March	1,334	1,034.4	1,470	819.3
April	1,350	1,009.6	1,523	797.6
May	1,364	998.5	1,568	736.3
June	1,369	940.6	1,580	706.6

Canal Zone schools—Total enrollment for the year, by schools.

Schools.	Pupils.
White schools:	
Ancon high school	34
Empire—branch high school	36
Gatun—branch high school	23
Grade schools—	
Ancon	246
Corozal	10
Pedro Miguel	84
Paraiso	31
Culebra	71
Empire	186
Las Cascadas	54
Bas Obispo	26
Gorgona	145
Gatun	168
Cristobal	224
Toro Point	13
Porto Bello	18
Total (net)	1,369
Total for all colored schools (net)	1,580
Total net enrollment	2,949

Canal Zone schools—Enrollment by grades.

Grades.	White.	Colored.	Total.
Grade I	315	577	892
Grade II	203	401	604
Grade III	191	316	507
Grade IV	152	144	296
Grade V	146	101	247
Grade VI	132	34	166
Grade VII	83	7	90
Grade VIII	54	.....	54
Grade IX	52	.....	52
Grade X	25	.....	25
Grade XI	6	.....	6
Grade XII	10	.....	10
Total	1,369	1,580	2,949

Canal Zone schools—Number of teachers employed.

Months.	White.	Colored.	Total.
1912.			
October	46	29	75
November	45	29	74
December	47	31	78
1913.			
January	47	31	78
February	47	31	78
March	46	31	77
April	46	32	78
May	47	32	79
June	47	32	79

Canal Zone schools—Sickness of teachers.

Months.	Number of days of sickness.		
	White.	Colored.	Total.
1912.			
October	23.5	.....	23.5
November	34.0	.....	34.0
December	20.5	.....	20.5
1913.			
January	16.5	3.5	20.0
February	58.5	3.0	61.5
March	24.5	.5	25.0
April	76.0	.....	76.0
May	32.5	3.0	35.5
June	26.0	.....	26.0
Total	312.0	10.0	322.0

Canal Zone schools—Value of products raised in school gardens.

Products.	Unit.	Quantity.	Price.	Proceeds.
			Cents.	
Papayas	Each	328	25	$82.00
Bananas	Bunch	90	35	31.50
Tomatoes	Pound	686	10	68.60
Beans	...do	688	15	103.20
Lettuce	Bunch	225	3	6.75
Turnips	...do	102	5	5.10
Okra	Dozen	342	10	34.20
Cabbage	Pound	340	5	17.00
Total				348.35

SAMOA.

Report on Progress of Education in American Samoa during the Year Ending June 30, 1913.

By Lieut. S. L. Henderson, United States Navy,

Chief Customs Officer.

The school system of American Samoa is unsatisfactory and inadequate. This is partly due to a lack of coordination, and because there is no directing authority, such as a superintendent of schools

or a commissioner of education. It is the intention of the present governor, however, to appoint a board of education with a superintendent of schools at its head.

No data are available from any former report of this nature, so that a comparison to show progress is not possible.

At the present time there are eight recognized schools on the island of Tutuila. Six of these are sectarian and two are island Government schools; three are for boys, three for girls, and two are mixed—both boys and girls. These schools are taught by Catholic Marist Brothers, by Catholic Sisters, by representatives of the London Missionary Society, by Mormon Elders, and by a teacher from the United States engaged through the Bureau of Education. In addition to these schools, there are a number of small local village schools taught by native pastors of the London Missionary Society.

In July, 1912, a conference of all these teachers was held for the purpose of devising a plan to systematize the schools of American Samoa. "A Plan for the Unification of Public Schools" was the result. It included a course of study, a system of grading, and a list of standard books recommended for use. Sufficient time has not yet elapsed for the schools to conform entirely to the grades established. The books recommended have proven satisfactory, with the exception of the primary arithmetic, which is suitable only for Philippine schools, for which it was written. It is believed that in time the "plan" will be followed and will be the standard for grading.

The compulsory education regulation of 1912 provides that all children between the ages of 6 and 13 shall attend school unless prevented by actual illness or unless excused by the Secretary of Native Affairs for good and sufficient cause. This law is hard to enforce.

Attendance at the boarding schools is regular, but at day schools it is very irregular, because the parents do not realize the importance of education. Children are not encouraged to go to school. The principal of one school reports better work done by those of his pupils who are entirely separated from parental influences.

Samoan children have fine memories and can learn a language readily, but are deficient in reasoning powers. Progress in teaching English to Samoans has been good; pupils finishing the third grade can keep up an ordinary conversation and write an easy letter.

The following forms of manual training are taught: Carpentry, agriculture, sewing, cooking, and general housework; to some extent lace and basket making. Great aptitude is shown for carpentry and agriculture. Samoans are fond of music and sing a great deal. One boarding school has a creditable boys' band.

THE PUBLIC SCHOOLS OF GUAM.

Area: 210 square miles. Population, June 30, 1911, 12,240.

(Abridged from the Ninth Annual Report of J. Schnabel, Superintendent of Public Instruction for the Island of Guam.)

GENERAL SURVEY.

During the past fiscal year the progress made by the pupils of the public schools of Guam was very gratifying, considering the difficult conditions under which the work is done. The native teachers are required to give instruction in a language not their own, and the pupils are expected to grasp ideas which are scarcely less foreign than the language. It would be unreasonable, therefore, to expect of them progress equal to that of an American school.

Instruction in the public schools is elementary, and the acquisition of the English language is the chief object. The books are specially designed for the use of the native child. The studies of the most advanced school are as follows: Arithmetic, history, geography, grammar, and physiology. The pupils of this school are generally very bright; many desire to become teachers. The most advanced students usually participate in the semiannual examinations, and as a rule their averages compare very favorably with the averages made by the teachers. The general course of studies prescribed in the schools is practically the same as in the majority of the public schools in the United States up to and including the sixth grade.

Special attention is paid to industrial instruction, the general plan being to apprentice for a period of four years young men who desire to learn a trade. At the beginning they are given a small per diem wage, and their pay is increased in accordance with their proficiency and aptitude. Each apprentice is under the direct supervision of a competent foreman. The subjects that are taught in this school are: Plumbing, painting, blacksmithing, carpentry, harness making, etc.

School attendance is obligatory from the age of 6 to 12 years. Any pupil absent without proper excuse is fined 12½ cents per day. There is comparatively little absence.

A native band has been organized. It has at present 14 members, and they are under the instruction of Musician Sgambelluri. The progress made by the members of this band has been gratifying.

INDIVIDUAL SCHOOLS.

A night school is conducted, with 26 male and 10 female students. The pupils have advanced rapidly under the efficient direction of their principal, Mr. D. M. Routson. Following is the routine of the night school: Monday—grammar, arithmetic, and spelling; Tuesday—

geography, arithmetic, and history; Wednesday—history, grammar, and geography; Thursday—arithmetic, grammar, and spelling; Friday—arithmetic, grammar, and physiology.

The *High School*, also known as Agana School No. 2, is the most advanced public school on the island. The school is steadily progressing under the supervision of the principal, Rev. A. U. Logan. The pupils are enthusiastic in their studies and are desirous of becoming teachers; the most advanced have nearly always participated in the semiannual examination and have made very favorable averages. The studies embraced in the higher classes are: Complete arithmetic, complete geography, grammar, complete history, elementary physiology, Jones's fourth and fifth readers. The lower grades are confined to elementary studies.

The classes in industrial arts in the *Industrial school* consist of 12 apprentice carpenters, 4 apprentice blacksmiths, 1 apprentice machinist, 1 apprentice harness maker and 3 apprentice plumbers. This class was created by Executive General Order No. 100, promulgated September 6, 1905. The majority of apprentices advance well and their work is generally very gratifying.

Agana School No. 1 is divided into 8 classes, with 8 teachers in charge. The pupils of this school are graded carefully; class work is arranged within an elementary and comprehensive scope, and pupils who accomplish the desired results are not held back by dull and obstinate classmates, but are advanced to higher grades. The acquisition of the English language is the chief object of the school.

The progress of *School No. 3* during the past fiscal year has been satisfactory. Miss Magdalena Herrero, the principal, is to be credited for the excellent deportment of the pupils. The studies are practically the same as those in school 1.

The *Asan School* is in charge of Mr. Vincente Ty-dingco who has had about four years' experience in teaching. The studies are of an elementary nature.

Mr. E. Schwinn, principal of the *Piti School* assumed charge April 9, 1913. The majority of the pupils of this school speak English fairly well.

The *Sumay School* is under the supervision of Mr. A. P. Manley. His experience as teacher covers a period of about eight years. The routine of the school includes the elementary subjects. A reservoir is in course of construction.

The progress of the *Agat School* has been somewhat retarded owing to the fact that the teachers in charge, usually hospital apprentices, are unable to remain on an out-station longer than a year at the most. Such changes are obviously detrimental in obtaining best results from the pupils. The teacher is Mr. Jose Roberto.

A new building for *Umatac School* was to have been erected the last fiscal year, but owing to lack of laborers it was impossible. It will be erected in the near future. The pupils are doing very well. The teacher is Mr. Joaquin Torres.

The advancement made by the pupils of the Merizo School during the past fiscal year, under the direction of the principal, Mr. Jose Cruz, has been gratifying. Mr. Cruz has had about six years' teaching experience. The subjects taught are of a practical and elementary nature.

The progress made by the pupils of the *Ynarajan School* has been very good considering the fact that several changes of teachers have been made during the last fiscal year. Mr. Jose Kamminga is the principal.

The *Dededo School* is in charge of Mr. J. H. James. He gives his pupils good practical instruction in elementary work. A reservoir has been constructed here for school use.

The *Ordot School*, situated about 2 miles south of Agana, on the Pago Road, was organized in 1912. Previous to the erection of this building the children were required to attend the Agana schools. Mr. Jose Duenas is the principal.

At the request of the people of Yigo and vicinity an excellent school building, spacious and well ventilated, was constructed during the past fiscal year, and the school was opened for attendance on February 17, 1913. This school is a great convenience for the people of that part of the island, for it is now possible for them to live permanently on their ranches and cultivate their land, much of which was apparently abandoned previous to the organization of the school. The class of work is of a practical and elementary nature. Mr. A. W. Jackson, assistant superintendent of public instruction, is in charge.

GENERAL REVIEW.

The schools of the island are in a prosperous and progressive condition. The teachers manifest a desire to increase their own efficiency, as well as to inculcate a spirit of progress in the schools. They are desirous of having their school buildings and grounds as tidy as possible. Changes might be made which would better the present course, but it is far better than the old course. More buildings and more serviceable materials for teaching, like blackboards, are needed.

School statistics.

Number of children registered	1,896
Number of children of school age	1,473
Number of children excused to ranches	242
Number of children over age	181
Average daily attendance of pupils	1,489
Average daily absentees	173

Number of island teachers employed	15
Number of substitute teachers employed	4
Number of special laborers employed	11
Per cent of attendance, 1912–13, boys	93.12
Per cent of attendance, 1912–13, girls	91.69
Income from fines, fees, sales, etc	$671.03
Expenditures:	
For teachers	$2,737.91
Repairs, furniture, building, etc	2,435.34
Miscellaneous	2,250.86
Total	7,424.11

CONCLUSION.

In my opinion it should be the first duty of the Government to attend properly to educational matters in order to provide sound, useful instruction to all children of school age. A majority of the school children can not enjoy the advantages of advanced education, since necessity compels their parents to withdraw them from school before or about the time they have completed the study of the elementary branches. The lower schools should therefore receive all possible attention. I am compelled to dwell particularly on this subject, as it is a regrettable fact that teachers and pupils in many instances have shown indifference toward the study of the fundamental branches and unreflecting eagerness to reach the higher studies without due preliminary work. The tendency in many schools seems to be, unfortunately, to attempt too much without a thought of the most necessary part of the work.

Although the schools of the island are not what they should be, they nevertheless are steadily improving; the people are apparently taking a greater interest in the schools than heretofore, and the teachers are almost without exception earnestly laboring to keep abreast of the times.

While we have a few teachers who have only a superficial knowledge of the branches they teach, no practical knowledge of the higher studies, and no definite plan of school organization, yet many are well qualified for the work and feel the dignity and responsibility of their profession

CHAPTER XXX.

EDUCATIONAL ACTIVITIES IN CANADA.

By Anna Tolman Smith,

Specialist in Foreign Educational Systems, Editorial Division, Bureau of Education. [1]

Contents.—Introduction—Main direction of current efforts—Practical training in the elementary and high schools—The Strathcona Trust—Current statistics—Students in high-school studies in specified Provinces—The royal commission on industrial training and technical education: Origin and scope; appropriations recommended; recommendations as to vocational education—Dominion development—The education of Indians.

INTRODUCTION.

The current record of education in the Canadian Provinces shows a continuance of efforts to extend the public-school provision and to provide for the teaching of manual arts and rural industries. Although many agencies have contributed to the latter movement, for instance, the Christian Brothers, who carry on an extended work in the Province of Quebec, the endeavor to make these practical arts an obligatory part of elementary school instruction is the outcome of the fund contributed by Sir William Macdonald in 1899 and the plans adopted by Dr. James W. Robertson for its administration. This fund, it will be remembered, was available in every Province, and it was provided that after the experimental stage of the effort thus set on foot was passed the work should be adopted into the school systems. This has accordingly been effected, in theory at least, and the special forms of instruction maintained under the terms of the Macdonald fund are now so merged with the general work of the schools that it is not easy to trace the far-reaching effects of the endowment.

MAIN DIRECTION OF EFFORTS.

In regard to the new orders of instruction, little can be added to the particulars reported in 1912. The general organization of the practical training has made greatest progress in Ontario and Nova Scotia. In Quebec the movement for promoting rural industries has been stimulated by the affiliation of the agricultural school maintained by the Trappists of Oka with Laval University; the institution by the university of a diploma of bachelor of agricultural science and its award for the first time at the close of the last session have

[1] The chapters in this report relating to education in foreign countries were prepared under the direction of the Specialist in Foreign Educational Systems, unless otherwise credited.

awakened new interest in this industry. To quote the official report, it has "cast a brilliancy over the whole farming class."

While all the universities and normal schools of the Provinces are turning their attention to providing means for training teachers of agriculture and the mechanic arts, several centers of this work stand out with special prominence. Chief of these is the Macdonald College for Training Teachers, situated at Ste. Anne de Bellevue, but affiliated with McGill College and University, Montreal. The training college, which has already achieved international distinction, is a direct outcome of the Macdonald endowment.

The seven provincial normal schools of Ontario prepare students for the special certificates conferred by the department of education upon candidates who meet the requirements for teachers of elementary agriculture and horticulture, manual training, and household science. The faculty of education of the University of Toronto provides post-graduate courses leading to a degree in household science, and the affiliated agricultural college prepares students for the degree of bachelor of the science of agriculture. Queen's and McMaster Universities have instituted the same degree, and arrangements are made by which the first two years of the degree course are given at the universities and the last two years at the agricultural college. The certificate courses in the normal schools, the diploma courses of the higher institutions, and the expert supervision exercised by the director of instruction in elementary agriculture, and the inspection of technical training, all tend to assure success for the new subjects in the elementary schools.

The Nova Scotia Technical College and the Agricultural College at Truro have effected a combination with the Provincial Normal School for the purpose of providing the technical, scientific, and professional training required for teachers of practical subjects in the elementary schools. The immediate effect of this provision is, so far, more apparent in the secondary technical schools than in lower grades.

A summer school of agriculture and nature study for the teachers of rural schools in the Province of Prince Edward Island is maintained by the cooperation of the Education Department and the Prince of Wales College at Charlottetown. The course of instruction for the current year was arranged for two weeks, and was attended by over 250 teachers, or nearly half the total number engaged in the schools of the island. The staff of lecturers was unusually strong, and included several well-known professors from New England institutions.

The traveling expenses and a portion of the living expenses of the attending teachers are met from the Dominion grant of $26,000 for the promotion of agriculture in the Province.

PRACTICAL TRAINING IN ELEMENTARY AND HIGH SCHOOLS.

In Ontario provision for agricultural training is made in departments connected with continuation and high schools, of which 27 are now in operation. The teachers in charge of these departments are also county representatives of the Department of Agriculture, with many duties associated with field work. This prevents their devoting as much time to the school work as is desired, although in some respects it increases the practical value of their instruction. Measures, however, have been adopted looking to a supply of teachers who shall be competent to take charge of both the science and agricultural courses in the high schools. In order to encourage candidates to pursue the course leading to the diploma in agriculture, the Government proposes to offer a scholarship of $100 at the end of each of the two years, to be taken at the agricultural college, for every candidate who passes the final examination and is recommended by the president of the college.

The director of elementary agricultural education reports decided progress during the year. The grants allowed for school gardens have naturally increased interest in the work, and all the gardens are now conducted under teachers trained at the agricultural college. Up to February 1, 1913, 99 schools had qualified for work done in 1912 and were entitled to grants amounting to $4,370. The director observes that, if this rate of increase could be maintained, in a few years all the rural schools in the Province would be engaged in this work.

The instruction in manual arts and household science, representing one division of the work originally contemplated by the Macdonald fund, is given at "centers" which draw classes from surrounding schools. The number of manual-training centers reported for 1912 was 66, of which 14 were in the city of Ottawa, 28 in Toronto, 5 at Hamilton, and the remainder situated in smaller towns or in rural communities.

The number of household-science centers reported was 51, of which Toronto provided 20, Ottawa 2, Hamilton 6, London 7; the remainder were in smaller towns or rural centers.

The following statement by the superintendent of public instruction for Quebec covers the chief educational activities in that Province for the current year:

In the year 1906 the department and the Protestant committee of the council of public instruction organized a campaign in the interest of the Protestant rural schools of the Province. Meetings were held in suitable centers, which were addressed by leading educationists.

The chief subjects discussed were those of better salaries for the teachers, the value of training for teachers, and consolidation. Some good results were visible in time from this campaign, but more particularly as the Government grants largely and steadily increased during the succeeding years. In 1912 another campaign was held at the instance of the Protestant committee, and although, owing to weather condi-

tions, the attendance at the meetings was considerably less than in 1906, the results were more striking and rapid. This was doubtless due to the fact that in the meantime there had been much public discussion, and a greater readiness to advance had been developed. The aid to the rural schools was also by this time much more substantial, and the school boards were therefore in a better position to take progressive action. Salaries have greatly improved and a good deal of partial consolidation has been effected.

At the time of writing a campaign is being organized for the autumn of 1913. This work is also supplemented by annual educational exhibits at the Sherbrooke Exhibition, which is practically a provincial institution.

Similar work is being carried on in the form of "Regional Conferences" for the Roman Catholic schools by the department of public instruction. Members of school boards from one or more counties are gathered at a central point and addressed upon the questions affecting their schools. Here, too, admirable results are reported.

The response of the rural school boards, Roman Catholic and Protestant, to the demand for better salaries for the teachers has been greatly helped by the minimum-salary grants. In the year 1908 the sum of $50,000 was expended for this purpose in the rural municipalities of the Province. In 1909 the amount was $75,000; in 1910, $100,000; in 1911, $125,000; and in 1912, $225,000. These grants are being continued. Any board falling below a certain minimum fails to receive any portion of the grant. The minimum is not compulsory, but the great majority of the school boards are now realizing that it is to their interest to meet the requirements for the grants.

Another development of recent years is the holding of summer schools for teachers in the subjects of oral French, drawing, and physical exercises. The summer school in oral French is of large importance and is conducted on behalf of the Protestant teachers. About 15 academies now receive special grants for engaging a specialist qualified to give the instruction. The specialist is required to supervise the oral French in all the grades of the academy. Facility in both languages is very important for the English-speaking people of the Province.

In his report for the year 1911–12 the superintendent notes also that the work of school gardens has made marked progress, 18 schools in 45 counties reporting very excellent results in this respect. The teachers are said to be full of enthusiasm over the subject, and the parents equally so, the latter because they see in this movement a means of attaching their sons and daughters to their native localities. At the close of the last year the names of 5,945 pupils were reported as deserving reward for their industry and success in the cultivation of their garden plots.

The Council of Arts and Manufactures of the Province of Quebec is a private body which maintains classes in arts and trade in the chief centers of industry. This purpose is aided by a provincial grant, which amounted in 1912 to $16,000, and also by substantial appropriations from boards of trade, chambers of commerce, and various trade associations. During the current year 51 classes were maintained, with an enrollment of 2,633 pupils. These classes have been of great benefit to young artisans and commercial clerks, and there is a very general demand that the council should be more liberally aided in its benevolent work.

The current report of the superintendent of education for New Brunswick gives detailed accounts of four consolidated schools, which embody the salient features of the plan originally suggested by Dr. Robertson. In each of these schools special equipment is provided for manual-training and domestic-science departments.

In Nova Scotia the stress of effort with respect to the promotion of practical training relates to the technical industries connected with mining. The training is organized under the immediate supervision of a director who is also principal of the Nova Scotia Technical College. In addition to the secondary technical schools, which are accomplishing important results, an experiment has been recently made in the conduct of mining science courses for boys in the three upper grades of the public schools. It is reported that—

> The boys show much more interest in mechanical drawing of common parts of colliery machinery than they did in the freehand drawing of the regular public-school course. Elementary mechanics seems more vital to them than botany. The chemistry of colliery explosions and of combustion appeals to them to a far greater degree than the dry formal statements of the atomic theory, the laws of chemical combination, etc. The mining science course is keeping the boy in school for a greater length of time than formerly, because he feels that the course in the public school contains some instruction which aims to prepare him somewhat for his life struggle in the industry which is the greatest single center of interest in a mining town.

The evening technical schools, which are maintained by the cooperation of the local school boards and the provincial government, were in operation in five towns and cities during the current year. The provision in the evening technical schools of classes in needlework for young women, which was announced at the opening of the current session, excited large response, and in the case of Halifax many applicants for admission had to be turned away. These classes do not attempt to teach trades, but are intended to instruct young women in the simpler forms of sewing required in every household.

The Macdonald consolidated school at Hillsborough, Prince Edward Island, was discontinued in June, 1912, although at the time its reopening was anticipated by the educational authorities. The plan has since been abandoned. This school, which was opened originally in May, 1905, was a model in all respects and the hope was entertained that it might lead to the uplift of rural education throughout the island. During the first three years of its existence the school was maintained at the expense of the Macdonald fund, but in 1908 the six districts for which the school provided were requested to increase their taxes from 11 to 40 cents on every $100 worth of assessed property to meet the expenditure for this institution, and since that time opposition to the enterprise has been increasing, and finally four of the districts withdrew from its support. Presumably

the failure of this school, which was due entirely to local and personal causes, will interfere for a long time with attempts at consolidation. It is noticeable, however, that two school districts have since united without any outside intervention to maintain a two-room school, replacing two 1-room schools; this example may be followed by other districts.

The provincial government has increased its appropriation for the schools of the island by a fund which adds approximately 20 per cent increase in salary to all teachers, with provision for the monthly payment of salaries instead of quarterly, as heretofore.

The consolidated school has not been adopted to any great extent in the eastern Provinces of Canada, but is making progress in the west, particularly in Manitoba. The movement in this Province seems to have been spontaneous with the taxpayers, and therefore it commands that popular support which is wanting in the east. Two consolidated schools were established in 1906; they numbered 40 in 1912, and plans for additional schools for 1913 were reported. Interest in the system has been fostered by an illustrated bulletin issued by the department of education. This publication sets forth in graphic form the advantages of the system and excites emulation by vivid pictures, contrasting the old-style district schoolhouse with the fine substantial buildings by which they are replaced in the centers of consolidation.[1]

British Columbia reports the first experiment at consolidation for the fall term of 1912. Four district schools were closed and children were conveyed from these to the central graded school. So far there seems to be every prospect of success from this change.

During the school year ending June 30 there were 18 manual training centers in operation in this Province, and by reason of increased appropriation from the Government 14 new centers were opened in the fall term. This brings the total to 32 centers, with a staff of 30 instructors. The instructors of manual training note that a decided improvement has been shown in the ordinary work of the schools, and the boys in the manual training centers have made models which have been of great use in the drawing lessons in the regular course of instruction.

THE STRATHCONA TRUST.

Lord Strathcona, who held the office of High Commissioner for the Dominion of Canada from 1896 to 1911, recently donated a sum of money for promoting physical training and drill in the schools of the Dominion. This fund has been placed at the disposal of a committee called the Strathcona Trust, and the interest on the invested money is to be annually divided between the Provinces in

[1] See Manitoba Department of Education. Consolidation of Rural Schools, 1912.

proportion to the respective population. The general regulations governing the trust provide that 50 per cent of the whole amount for each Province shall be given for physical training in the schools under the department of education, 35 per cent for military drill, and 15 per cent for rifle shooting.

The minister of education from Ontario reports that of the $10,900 allotted to Ontario $2,180 has been apportioned to the high schools and $4,360 for physical training in the elementary schools. Specific instructions have been issued by the department with respect to the conduct of this training. Similar action has been taken by the other Provinces.

CURRENT STATISTICS.

In respect to particulars given in the appended tables, there is little change from year to year excepting in the newer Provinces, in which the population is rapidly increasing. From the high ratio of enrollment to population (Table 2) it will be seen that a large proportion of children and youth were under instruction during the year, but much irregular attendance is indicated by the ratio of average attendance to enrollment, which does not exceed 75 per cent in any one of the Provinces. The apparently excessive expenditures for education in the newer Provinces is due in great measure to the necessity of providing at once all the material conditions of a school system.

TABLE 1.—*Population, school enrollment, and average attendance.*

Provinces.	Population.[1]	Public schools.		Ratio of enrollment to population.	Ratio of average attendance to enrollment.
		Enrollment.	Average attendance.		
				Per cent.	*Per cent.*
Ontario	2,520,000	[2] 459,948	281,984	18.25	61.31
Quebec	2,000,000	422,615	314,520	21.13	74.42
Nova Scotia	492,338	103,984	66,736	21.12	64.18
New Brunswick	352,000	69,199	44,433	19.66	64.21
Manitoba	455,000	76,247	.....	15.17	.....
British Columbia	363,000	57,384	43,274	15.80	75.41
Prince Edward Island	94,000	17,078	10,916	18.17	63.92
Alberta	373,000	61,660	.....	16.53	.....
Saskatchewan	492,000	70,567	37,701	14.33	53.43

[1] Provisional figures, census of 1911.
[2] Not including high schools and collegiate institutes, which enrolled 32,227 pupils.

TABLE 2.—*Enrollment—Teachers classified by sex.*

Provinces.	Year.	Enrollment.			Teachers.		
		Boys.	Girls.	Total.	Men.	Women.	Total.
Ontario	1911	236,147	223,801	[1] 459,948	1,499	9,043	[1] 10,542
Quebec	1912	212,738	209,877	422,615	3,365	11,561	14,926
Nova Scotia	1912	.....	.....	103,984	293	2,511	2,804
New Brunswick	1911–12	.....	.....	69,199	.....	.....	2,015
British Columbia	1912–13	29,544	27,840	57,384	.....	.....	1,597
Prince Edward Island	1912	8,995	8,083	17,078	162	428	590
Saskatchewan	1911	36,926	33,641	70,567	1,316	2,175	3,491

[1] Not including high schools and collegiate institutes, which enrolled 32,227 pupils.

TABLE 3.—*Expenditure for public elementary and high schools.*

Provinces.	Expenditure.	Per capita of enrollment.
Ontario	[1] $9,904,284	$21.54
Quebec	6,562,440	16.40
Nova Scotia	1,334,561	12.83
New Brunswick	942,250	13.61
Manitoba	2,590,345	33.97
British Columbia	[2] 4,027,930	70.00
Prince Edward Island	261,641	15.32
Alberta	2,085,056	33.81
Saskatchewan	[2] 3,993,000	[2] 56.54

[1] Not including high schools and collegiate institutes, which enrolled 32,227 pupils.
[2] Includes current and permanent expenditure.

STUDENTS IN HIGH SCHOOLS.

The following table shows the number of students in high schools or in high-school grades in three Provinces. With the sole exception of Ontario, the pupils are included in the enrollment given in the preceding table. In Ontario the high schools are organized and conducted very much like those in the United States, but they are under separate administration from the elementary, or public schools, as they are termed in Ontario. The high schools in this Province are not free schools, but arrangements are made for remitting the fees when deemed desirable.

In Quebec the classification of schools is entirely different, the curriculum corresponding to a complete high school in the United States being confined to private colleges. The public schools in this Province have upper grades termed "model" and "academic"; and the studies of the last year and sometimes of the last two years partake somewhat of the nature of high-school studies. From these observations it will be seen that the only common basis for determining the number of high-school pupils in the several Provinces, using the term as it is understood in the United States, is that of branches of study.

TABLE 4.—*Number of students in leading high-school studies.*

Studies.	Ontario.	New Brunswick.	Nova Scotia.
English	31,031	1,808	4,574
History:			
Canadian	24,683	1,808	152
British	23,736	----	----
Languages:			
Latin	23,443	1,394	1,405
Greek	666	38	----
French	20,684	1,567	1,639
German	5,024	----	----
Mathematics:			
Algebra	28,777	[1] 1,839	4,402
Geometry	25,111	1,742	210
Trigonometry	1,921	[2] 13	----
Science:			
Physics	24,904	[3] 679	3,303
Physiology and hygiene	----	[4] 688	----
Chemistry	16,961	[4] 718	----
Botany	16,254	[1] 1,710	3,388
Art:			
Drawing	16,906	[3] 721	3,626
Music	----	----	250
Bookkeeping	14,681	[1] 1,063	173
Domestic science	----	----	171
Manual training	----	----	125

[1] Grades 9, 10, and 11. [2] Grades 11 and 12. [3] Grade 9. [4] Grades 10 and 11.

THE ROYAL COMMISSION ON INDUSTRIAL TRAINING AND TECHNICAL EDUCATION.

The greatest event in the educational record of the Canadian Dominions for the year is the publication of the report of the royal commission on industrial training and technical education. The order under which this commission was constituted was based upon the report of a committee of the Privy Council, approved by His Excellency the Governor General (of Canada), June 1, 1910, which is here cited:

Report of the Committee of the Privy Council, approved by His Excellency the Governor General on the 1st of June, 1910.

On a memorandum dated May 28, 1910, from the Minister of Labor, stating that industrial efficiency is all important to the development of the Dominion and to the promotion of the home and foreign trade of Canada in competition with other nations and can be best promoted by the adoption in Canada of the most advanced systems and methods of industrial training and technical education.

The Minister further states that the Premiers of the several Provinces of the Dominion have expressed on behalf of the Governments of their respective Provinces, approval of the appointment by the Federal authorities of a Royal Commission on Industrial Training and Technical Education.

The Minister recommends that authority be granted for the appointment of a Royal Commission to inquire into the needs and present equipment of the Dominion as respects industrial training and technical education, and into the systems and methods of technical instruction obtaining in other countries; the said Commission to be appointed pursuant to vote No. 477 of the supplementary estimates for the fiscal period ending March 31, 1910, and to consist of the following gentlemen, viz:

James W. Robertson, Esq., C.M.G., LL.D., of Montreal, Que., *chairman*.

Hon. John N. Armstrong, Esq., of North Sydney, N.S.

George Bryce, Esq., LL.D., F.R.S.C., of Winnipeg, Man.
M. Gaspard De Serres, of Montreal, Que.
Gilbert M. Murray, Esq., B.A., of Toronto, Ont.
David Forsyth, Esq., M.A., of Berlin, Ont.
James Simpson, Esq., of Toronto, Ont.

The Minister further recommends that the said Commissioners be instructed and empowered to pursue their investigations at such localities as may appear necessary, in the Dominion of Canada, in the United Kingdom of Great Britain and Ireland, the United States of America, France, Germany, and, subject to the approval of the Minister, elsewhere on the continent of Europe; also that the purpose of the Commission shall be that of gathering information, the information when obtained to be carefully compiled, and together with such recommendations as it may seem expedient to the Commission to make, published in a suitable report to be at the disposal of the Provinces and available for general distribution.

The Minister further recommends that the Commissioners be appointed under the provisions of the statute respecting inquiries concerning public matters, and report the results of their investigations together with their recommendations to the Minister of Labor.

The Minister further recommends that Mr. Thomas Bengough, of Toronto, be appointed secretary and reporter to the said Commission.

The Committee submit the same for approval.

(Signed) F. K. Bennetts,
Asst. Clerk of the Privy Council.

As a result of the decisions reached by the commission, they recommend large grants from the Dominion treasury as follows:

First. That for elementary education a fund should be provided from a Dominion parliamentary grant, which should not be less than $350,000 a year for 10 years; this fund to be divided into nine portions in proportion to the population in each of the nine Provinces as determined by the latest census, and allotted to each Province in amounts not exceeding 75 per cent of the amount which such Province had paid during the immediate preceding fiscal year for the promotion and support of manual training, nature study, and prevocational work in elementary schools.

Second. The commission recommend that the sum of $3,000,000 be provided annually for a period of 10 years by the Parliament of Canada and paid annually into a Dominion development fund. With regard to the distribution of the fund, it is recommended that not less than 75 per cent of the amount annually added to the fund shall be—

divided into nine portions, in proportion to the population in each of the nine Provinces as determined by the latest census, and allotted to each Province accordingly, for development undertakings therein. Each of the said nine portions of the fund to be administered as the "(name of the Province) Account of the Dominion Development Fund"; and the remainder of the fund to be administered as the "General Account of the Dominion Development Fund."

RECOMMENDATIONS AS TO VOCATIONAL EDUCATION.

In view of the developments in European countries and of the testimony taken by the commissioners in Canada itself, they make sweeping recommendations with respect to the provision of vocational education for young people between 14 and 18 years of age who do not intend to pursue university and higher technical courses. While urging that "all children to the age of 14 years should receive the benefits of elementary general education up to at least the standards provided by the school systems of the place or Province where they live," they recommend that after 12 years of age, for the children whose parents expect them to follow manual occupations, training in the school "should have as close relation as practicable to the productive, constructive, and conserving occupations to be followed after the children leave school."

DOMINION DEVELOPMENT.

In their plan for nationalizing the proposed system of industrial training and technical education the commissioners enter into minute details of political organization and social conditions which pertain exclusively to Canada, but the considerations upon which the plan is based are pertinent to the United States, and for this reason are here cited:

1. It is important to adopt a plan which will secure the largest degree of public confidence and maintain the largest measure of public interest and cooperation.

2. It is important to adopt a plan which will preserve provincial control, encourage local initiative, and develop local responsibility.

3. It is important that there should be a large number of persons representing manufacturing industries, trades, commerce, transportation, agriculture, forestry, mining, fisheries, housekeeping, and education, ready to take the initiative in local undertakings and able to cooperate in making effective application to the needs of localities of financial grants and any other assistance. In the opinion of the commission, a policy which would be applied wholly or mainly by directive authority from headquarters, leaving to local centers little initiative or responsibility, would not accomplish much for a long time.

4. It is important that there should be in each Province a central body or authority, which could bring to bear on all proposals from local centers the wide knowledge and practical experience of capable men and women familiar with education and with industrial, agricultural, and housekeeping problems. Such a central body would be able to supply information for the guidance of local authorities at the beginning of their work, and to furnish advisory assistance through experts of high ability. Through the meetings and discussions of such a central body the permanent officials charged with the administration would be kept in touch with public opinion as to the particular needs of localities, as to the suitability and acceptability of schemes proposed, and as to the practicability of having such schemes supported and carried out. The central body would also serve the purpose of a clearing house through which an intimate knowledge of the results from experience in one locality would be made available to other communities.

5. It is important to adopt a plan, whereby the Dominion, the Provinces, the localities, and individuals will cooperate and each contribute in some well-considered and equitable proportion to the cost of development undertakings. A plan of organizal tion which provides for the financial support from communities being properly articulated with financial grants from central authorities would tend to bring about efficiency and stability. A long time is required to realize upon educational work; and continuity of effort to meet recognized needs is essential. The plan should be such as would insure concurrent progressive action in the same direction by the central and local bodies. Provision should be made for efficiency audits, in order that each contributing authority may be assured that the money is being used for the purpose for which it is granted, and that the work is being well done.

6. It is important to adopt a plan which will insure that the national interests, as well as the local points of view, will be considered.

7. It is important that there should be a Dominion consultative body, through which the widest knowledge and experience could be put at the service of all the Provinces and thus be brought to bear on problems and undertakings of consequence to them all.

8. It is important that there should be a Dominion authority competent to cooperate with provincial authorities, to provide expert counsel to any Province which might not be adequately organized or staffed to render service in that respect to all localities and industries within its borders, and to promote scientific industria-research and the diffusion of knowledge resulting therefrom.

EDUCATION OF INDIANS.

The Indian population of Canada is estimated at about 105,000, who are found mostly in the northwestern Territories and in the Provinces very recently formed from the Territories. The Dominion Government makes a provision for the instruction of the Indians, the schools themselves being under the direction generally of denominational managers. The following report gives recent particulars with reference to this work in British Columbia:[1]

On May 25, at the St. Eugene Mission on the Kootenay Indian Reservation, 6 miles north of Cranbrook, British Columbia, occurred the dedicatory exercises attending the formal opening of the Kootenay Industrial School for Indian children of the Kootenay and Shuswap tribes, which number nearly 600 people.

The building was completed in January last, after being 18 months under construction, as the inconvenient location and the rigors of the climate greatly delayed work at times. The school is a handsome structure of cement block and brick construction, with molded concrete trimmings and some granite. The style of architecture is very similar to that of the old Spanish missions and produces a very pleasing effect.

The main structure is 167 by 67 feet, with a chapel connection on the rear 25 by 47 feet. There are three stories, including the basement which is finished. The design is such as to allow the housing and instruction of the boys in one end of the building and the girls in the other, while the central portion contains the executive offices, staff rooms, dispensary, hospital ward, guest rooms, reception rooms, etc.

The instruction rooms for the boys consist of a large classroom and a well-equipped manual-training room, while the girls are provided with classroom and sewing room corresponding in size to the boys' rooms. Large recreation rooms are provided in the basement. All living, sleeping, and instruction accommodations are provided for 90 pupils and a staff of maintenance and instruction of six.

[1] For this report the office is indebted to Mr. Frank C. Denison, United States consul at Fernie, British Columbia.

The school is thoroughly modern in all its appointments, with a very efficient system of hot-water heating and ventilation. Electric light is generated by an independent unit consisting of a horizontal gas engine directly connected to a 15-kilowatt generator. The bread-kneading machinery, which is being installed, will be electrically driven. Provisions have also been made to light the modern farm buildings which are being erected for use in connection with the institution.

Water for use of the school comes by gravity from a stream through wooden pipes to a large underground iron storage tank, from which it is pumped into another underground iron tank by a combined pump and air compressor driven by a small gasoline engine working automatically, and which puts the water in the pneumatic tank under 40 pounds pressure.

Plumbing fixtures of the best American design are used generously throughout the building. There are well-equipped shower-bath rooms in the basement. A sewerage system has been installed, including a septic tank, the effluent of which is distributed in the porous soil by drain tile. Much of the equipment of the building throughout is of American manufacture.

The cost of the structure alone was approximately $100,000, while the furnishing and equipment cost several thousand more.

The school, while constructed by the Dominion Government, is under the management of the Sisters of Charity and replaces a number of old frame buildings which were used for that purpose until this year.

The Department of Indian Affairs of the Dominion Government employs the sectarian method of education of its Indian wards, and it is worthy of notice that this policy is directly the opposite of the secular method in use by the American Government.

The Kootenay Industrial School is the first of a series planned by the department of Indian affairs under the supervision of the superintendent of education for the purpose of bringing the education of the Indian to a higher standard. Where schools are in bad shape, new ones will be built and the old buildings demolished, while other schools will be remodeled.

Tenders have been let for a new school replacing the old buildings at the Sarcee Indian Reservation near Calgary and for additions to the school at Kamloops and other places. Before the season is over the department will probably call for tenders for a large school at Norway House.

While managed directly by the particular sectarian denomination whose religion the tribe has adopted, the schools are under the ultimate control of the department of Indian affairs, at Ottawa, and inspectors from this department pay periodical visits of inspection to these schools.

The object of the education of the Indian is to raise his standard of living and thus enable him to escape the ravages of the disease which devastates the race and also to give him a greater chance of competition with the whites, with whom he is thrown more and more into contact as the country becomes settled. The idea seems to be that it is a profitable investment to make the Indian a practical farmer, instead of leaving him in a state of lazy shiftlessness. For this reason the education of the Indian is along rudimentary lines and involves much practical training. In the Kootenay Indian School the mornings are given to recitation and study periods and the afternoons are spent in practical work on the school farm by the boys under the care of an instructor who sees that each pupil has practice in the operation of the various pieces of machinery with which it is necessary that they become familiar as practical farmers. The girls spend the afternoon in domestic science work, so far as practical to their future needs, and in dairying and poultry culture, etc.

In this school the children are dismissed from the school at the age of 17 and are generally very loath to leave. No further care or responsibility is taken of the graduates except that which the Indian agent is required to take. Consequently many

pupils, through the association with their parents and the lack of employment, lose the habit of thrift and industry which they learned at the school. This is more especially true of the girls than the boys, for the former do not have as much freedom as the boys and are placed in closer touch with the old ways.

In Alberta the department is conducting the experiment among some of the tribes of giving aid to the pupils after they have finished their course at school, in the endeavor to help and encourage them to keep up the standard of living and habits of industry ot which they became accustomed at the school. In order to do this one of the first things that is done is to encourage the establishment of separate homes by the young couples from the schools in order to enable them to escape to a large extent from the ever-present temptation of the old life of shiftlessness in the teepees of their parents. To further this end the young man is assigned to a plot of ground on the reservation and is loaned the sum of $300 by the department, in order to aid him to build a house and get his crops started. The money is all to be returned to the Government in five years without interest. The girl is presented with household utensils to the value of $75.

The experiment has been in progress less than five years, but it is reported as working out very satisfactorily and it is understood that it is the intention of the department to inaugurate a similar scheme among the graduates of the Indian schools in this Province. This is in line with the proposed rejuvenation of the educational system.

There are 104,956 Indians in Canada, of which number 24,781 are in the Province of British Columbia.

CHAPTER XXXI.

EDUCATION IN THE LATIN-AMERICAN STATES.

CONTENTS.—Mexico: Government schools for natives; local activities; the Federal District.—The States of Central America: Population and capitals; current educational events; efforts at scholastic unity.—Panama: School provision; technical school for women; the Institut Nacional.—States of South America: Introduction; Argentina; Brazil; Chile; Uruguay; Paraguay; "Greater Colombia"—Colombia, Ecuador, and Venezuela; Bolivia; Peru.

MEXICO.

Mexico is a federative Republic, consisting of 27 States, 3 Territories, and a Federal district. In this district and in the Territories the National Government has control of education. By an act of July 1, 1911, the Government was also authorized to establish elementary schools for the natives up to a certain number in any one of the States where the need is great. With these exceptions, the control of education rests with the several State authorities.

The political disasters of the year have prevented progress in the large plans that were formulated by President Madero, but measures have been taken to carry out the act of 1911 in respect to schools for natives. A report for 1912 shows that 209 schools thus authorized had been established, of which all but 42 were outside the Federal district. Including 9,537 pupils in the Government schools at the capital, the total enrollment in schools of this class was 13,616. Of the buildings occupied by these schools, 56, representing a value of $122,350, were the property of the State. This provision marks the beginning of a definite policy with respect to the neglected native population and promises to rouse local efforts for the increase and improvement of the schools for both the native and white inhabitants which are maintained by the States themselves.

In the State of Oaxaca, on the Pacific coast, interest has recently been awakened in the business and educational methods of the United States. The American consular agent at the city of Oaxaca, the State capital, calls attention to the experience of a local factory which had leased a number of complicated machines of American make, with contract for purchase in a certain time. After paying a royalty for some years with little success, because of the want of expert machinists, a young man from the factory was sent to the United States to work in the shops where the machines are made,

in order that he might learn how to keep up the machine repairs. Similar action is advised for other young men needing a mastery of the English language for commercial business or training in practical arts, mechanical, agricultural, etc.[1]

At Guadalajara, capital of Jalisco, also one of the Pacific States, there is a school of arts and crafts which serves as a model to neighboring countries. During the year, the governor of the Atlantic State of Yucatan made a special visit to the institution with a view to organizing a similar school in the capital of his own State.

Following the precedent established in the case of elementary schools, the proposition is made that the Government shall be authorized to organize schools of agriculture in the several States for the instruction of the laborers on the great estates (haciendas). These isolated endeavors mark illuminating points in extended areas wanting in schools, in intelligent labor, and in directive ability. The Federal district is the only section of Mexico which possesses the basis for an efficient system of schools; in this district, at the date of the last census (1907) the total enrollment in primary schools was nearly 12 per cent of the population, which compares favorably with the ratio in the leading countries. For the entire country the enrollment in primary schools (1907) was only 776,622, or less than 6 per cent of the population.

The civil war that has followed the death of President Madero has prevented the progress of educational reform for which he had planned. At the same time this interest has not been ignored. The budget for 1913-14 carries an appropriation of $13,926,600 (Mexican currency) for education, of which $2,006,645 was for higher education, $440,381 for the secretary's office, and $954,825 for the general expenses of public instruction, which leaves $10,500,000 ($5,250,000 United States currency) for primary education.

The provisional president has issued a circular letter to the secretary of public instruction relative to an adequate presentation of his department at the International Panama-Pacific Exposition at San Francisco, 1915.[2]

The primary schools of the capital are well organized and have the benefits of an admirable service of medical inspection, supplemented by anthropometrical tests by means of which records of the growth and physical status of each child are secured and preserved.[3]

The Federal capital is the seat of the National University of Mexico, organized in 1910 by the union of existing schools of law, medicine, engineering, and architecture, to which was added a graduate school for scientific research.

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[1] E. M. Lawton, American consular agent.

[2] Boletin Instruccion publica, Mayo y Junis de 1913, pp. 460–461.

[3] See Anales de higiene escolar, vol. 2, No. 4 (April), 1913, pp. 237–244.

There are also at the capital a School of Fine Arts, National Conservatory of Music and Declamation, Higher School of Administration and Commerce, a national trade school for men, and a school of arts and crafts for girls. Scientific interests are promoted by numerous societies, and the graduate school of the university promises to become an important center of research. One of the last enterprises fostered by President Madero was the meeting of the first Mexican Scientific Congress, which was held in the hall of the National Museum, City of Mexico, December 9 to 14, 1912, under the auspices of a scientific society, the "Antonio Alzate."

THE STATES OF CENTRAL AMERICA.

Central America comprises five States, of which the population and capital cities are as follows:

State.	Population.[1]	Capital.	Population of capital.[1]
Guatemala	2,064,470	Guatemala	109,412
El Salvador	1,200,000	San Salvador	65,000
Honduras	650,000	Tegucigalpa	28,949
Nicaragua	655,000	Managua	40,000
Costa Rica	388,000	San Jose	36,000

[1] Estimates taken from Centro America, vol. 5, No. 2 April, May, and June, 1913.

CURRENT EDUCATIONAL EVENTS.

The efforts for industrial development which mark the current record of the Central American States are accompanied by a growing sense of the importance of public education in progressive communities. Although advance in this respect is slow and uncertain, recent reports give promise of its steady continuance. Official statistics from Guatemala and Honduras show gain in the number and enrollment of pupils in 1911 as compared with 1908, and it is believed that equal gains have been made in the other States. Exact comparisons, however, in this respect are likely to be misleading on account of the imperfect methods of the official statistics. More convincing evidence of progress are afforded by special events that have taken place during the year.

The city of San Jose, Costa Rica, has recently contracted with an English firm for the erection of two school buildings at a cost of about $90,000 each. A Government school of domestic arts was opened in the same city in February of the current year with tuition fees at a low rate, i. e., $9 for matriculation and an additional charge of about $1.50 a month.

In the city of Guatemala a national school of telegraphy and a national college of agriculture were opened during the year, and the

Government has shown the desire for closer relations with the United States by the offer of five scholarships to American boys and girls desirous of pursuing courses in Guatemalan institutions of learning. These scholarships include board, lodging, uniforms, and washing, and are good for courses either in military, academic, or technical institutions.

The action was taken upon the recommendation of Minister Don Joaguin Mendez, representing his Government at Washington, who, in his letter announcing the offer, explained that the increasing relation between Mexico and the Central American States is indicated by the offer on the part of the Government of Mexico to admit 13 students from Salvador to a course in the National School of Agriculture, Mexico. This offer has been accepted by the Government of Salvador.

The growing tendency in the Latin American States to provide practical training for women is illustrated by a society recently formed for that purpose in the city of San Salvador. The society, which bears the title "Sara de Zaldivar," has founded a training school for women which has been approved by presidential decree. The Government is also extending aid to a college for girls at Sansonate, which, in addition to the regular curriculum, gives courses in dressmaking, embroidering, and cooking.

The Government School of Agriculture at Salvador has recently greatly increased its facilities for teaching and has added to its corps of professors a French veterinary surgeon who had been engaged in the same capacity in the Republic of Mexico. This institution is in charge of a French engineer. A large proportion of the pupils are maintained during the course by scholarship funds supplied by the Government.

The Government of Honduras is fostering several practical schools. Among these are the following: School for the cultivation of tobacco, at Danli, which has already been the means of increasing the value of the product, one of the most important in the State; a school of practical agriculture opened the present year at Siguatepeque, for which 34 national scholarships have been allowed; a school at Catamarca for the manufacture of straw hats, and a school for artisans in the city of Tegucigalpa. Arrangements have also been made for sending students to foreign schools for special training. In this number are included five students who have been assigned to the well-known military college at Chapultepec, Mexico, and a young woman of unusual ability who will study medicine and surgery at one of the universities of the United States.

EFFORTS AT SCHOLASTIC UNITY.

Special importance attaches to conventions pertaining to education adopted by delegates to the Third Central American Conference. These conventions provide:

(1) For unifying the courses of study in the schools of the different States.

(2) For the establishment of central institutions maintained by the united funds of the five States and open to students from all alike upon common condition.

The exact nature of the agreements is set forth in the following decrees issued by the National Congress of Honduras, the first State to ratify them:[1]

DECREE No. 46.

The National Congress decrees:

SOLE ARTICLE.—Let the Convention adopted by the delegates to the Third Central American Conference for the unification of primary and secondary instruction be approved, which is literally as follows: "Convention for the unification of primary and secondary instruction of Central America.—The Governments of Honduras, Guatemala, Nicaragua, El Salvador, and Costa Rica believing that the unification of primary and secondary instruction under a common system and identical principles must be the firmest basis for rapprochement and fusion of the five Republics of Central America and for the unification of their ideals and aspirations; desirous, on the other hand, that the labors that may be performed for the union of said Republics may have as far as may be possible an efficacious and practical character, to which the realization of such a proposal is undoubtedly bound to contribute; in order that this may be accomplished have named delegates: Honduras, Dr. Manuel F. Barahona; Guatemala, Lic. José Pinto; Nicaragua, Arturo Elizondo; El Salvador, José Antonio Rodriguez; and Costa Rica, Lic. Carlos Lara. The delegates having met in the Hall of Sessions of the Central American International Office and having communicated to one another their respective full powers, which were found in due form, agreed upon the following stipulations: Article I.—The afore-mentioned Governments agree that in the year one thousand nine hundred and twelve the primary and secondary instruction of each one of the countries shall be made uniform with that of the other four, so that it shall be alike in the schools of the five Republics. Article II.—To this end each one of the contracting Governments shall in due season designate two or more suitable persons who shall proceed as soon as possible with the necessary preliminary study. Article III.—These same persons, in representation of their respective countries, shall meet to form a pedagogic congress, which must be inaugurated the 1st of December of the current year, in San Jose de Costa Rica. Article IV.—The pedagogic congress aforesaid, besides other labors that may be intrusted to it, shall adopt a common system of instruction and shall formulate the programs of each subject, all in conformity with the most advanced principles of modern pedagogy. Article V.—The ratification of the present convention shall be communicated by the other Governments to that of Guatemala and this in its turn shall communicate that of its country to the others, the agreement going into effect two months after the last ratification.—Signed in the City of Guatemala, in five such of equal tenor, on the twelfth day of the month of January, one thousand nine hundred and eleven.—Manuel F. Barahona. José Pinto. Arturo Elizondo. Carlos Lara. J. A. Rodriguez. Tegucigalpa, January 13, 1913.—In respect of the conven-

[1] Translated copies furnished by the Department of State.

tion for the unification of the primary and secondary instruction in Central America concluded by the delegates to the Third Central American Conference, in session in the city of Guatemala in January, 1911, Dr. Manuel F. Barahona being the delegate of Honduras in signing the convention in question acted within the instructions that were for the purpose communicated to him; the President orders: To approve said conventions in all these parts and that accounts shall be given thereof to the National Congress in its present session for such action as may be necessary.—Let it be communicated. MANUEL BONILLA. The Secretary of State for Foreign Affairs, Mariano Vásquez."

Done in Tegucigalpa, in the Hall of Sessions, on the fifth day of the month of February, one thousand nine hundred and thirteen.

FRANCISCO ESCOBAR,
President.

MANUEL VILLAR,
Secretary.

JESÚS NÚÑEZ h.,
Secretary.

To the EXECUTIVE:
Therefore: Let it be executed.
Tegucigalpa, February 8, 1913.

MANUEL BONILLA.
MARIANO VÁSQUEZ,
The Secretary of State for Foreign Affairs.

DECREE NUMBER 50.

The National Congress decrees:

SOLE ARTICLE.—Let the convention be approved that says: "Convention for the establishment, in 1912, of three Central American institutions.—The Governments of Honduras, Guatemala, Nicaragua, El Salvador, and Costa Rica, with the desire of making effective, in order to contribute to the rapprochement of the Central American countries among themselves, the stipulation contained in Article IV of the General Treaty of Peace and Amity signed at Washington, December 20, 1907, and in order that such effectiveness may take place within the shortest possible time, have named for the accomplishment of such aim their delegates, thus: Honduras, Dr. Manuel F. Barahona; Guatemala, Licentiate José Pinto; Nicaragua, Arturo Elizondo; El Salvador, Dr. José Antonio Rodríguez; and Costa Rica, Licentiate Carlos Lara. The delegates, assembled in the Hall of Sessions of the Central American International Office, after communicating to one another their respective full powers, which were found in good form, have agreed on the following: Article I.—The Governments aforenamed agree to establish in the course of the year 1912, or before if it be possible, the institutions recommended in Article IV of the General Treaty of Peace and Amity signed at Washington, December 20, 1907, by the same Governments, in the following manner: A practical school of agriculture in the Republic of El Salvador, one of mining and mechanics in that of Honduras, one of arts and crafts in that of Nicaragua. Article II.—The organization and regulation of the institutions indicated shall be previously approved by all the Governments; and to this end the Governments in whose countries they reside shall submit them previously to the knowledge of the others by the respective institution. Article III.—The five Governments, and in equal proportion, shall contribute to the expenses of inauguration and support of the three institutions in the form and term that shall be determined. Article IV.—The ratification of the present convention shall be communicated by the other Governments to that of Guatemala, and this one in its turn shall communicate that of its country to the others, the agreement going into effect two months after the last ratification.—Signed in the City of Guatemala, in five such of like tenor, on the twelfth day of the month of January, one thousand nine hundred and eleven.—Manuel F. Barahona, J. Pinto,

Arturo Elizondo, J. A. Rodríguez, Carlos Lara. Tegucigalpa, January 13, 1913.—In respect of the convention for the establishment, in 1912, of three Central American institutions, concluded by the delegates to the Third Central American Conference, assembled in the City of Guatemala in January, 1911, delegate for Honduras being Dr. Manuel F. Barahona; and whereas the delegate of Honduras in signing the convention in question acted within the instructions that were for the purpose communicated to him, the President orders: To approve said convention in all its parts; and that account be given thereof to the National Congress in its present session for appropriate action.—Let it be communicated. MANUEL BONILLA. The Secretary of State for Foreign Affairs, Mariano Vásquez."

Done in Tegucigalpa, in the Hall of Sessions, on the fifth day of the month of February, one thousand nine hundred and thirteen.

FRANCISCO ESCOBAR,
President.

MANUEL VILLAR,
Secretary.

JESÚS NÚÑEZ h.,
Secretary.

To the EXECUTIVE:

Wherefore: Let it be executed.

Tegucigalpa, February 8, 1913.

MANUEL BONILLA.
MARIANO VÁSQUEZ,
The Secretary of State for Foreign Affairs.

PANAMA.

The State of Panama occupies the isthmus, and, including the Canal Zone, has a population of 426,928 (census of 1912). The capital, Panama, is an old city founded in 1518 on the Pacific coast. The Government maintains public schools throughout the seven Provinces, which in 1912 numbered 294, with 19,362 pupils, not including the schools of the Canal Zone. There are a number of private secondary schools, and about 50 young men and 15 young women are being educated in Europe and the United States at Government expense.

TECHNICAL SCHOOL FOR WOMEN.

Elaborate rules and regulations have been issued for the recently established technical school for women. The school will be under the charge of a directress, assisted by an official staff and a corps of teachers whose duties are carefully defined. Provision is made for both boarding and day departments, the number of students being determined by the capacity of the buildings. For admission it is required that a candidate shall give testimonials of character, shall be not less than 14 years of age nor above 20, in good health, and that she shall have completed the course of elementary instruction. Students are admitted for three months on probation, after which they may be regarded as full members of the school.

The scholastic branches obligatory for all pupils are Spanish, arithmetic, and elements of bookkeeping, hygiene and home sanitation, elements of science, geography, and national history, English domestic and moral economy. Lineal drawing, gymnastics, writing, and machine drawing are also required. The industrial instruction consists of the following branches, which may be increased or diminished according to the course pursued: Cooking, darning and repairing, obligatory for all pupils; washing and ironing, obligatory for boarding and semiboarding, but elective for day pupils; ornamental drawing, obligatory except for those who take telegraphy or stenography. Courses are also given in cutting, fancy work, hatmaking, plain and artistic embroidery, and hand and machine weaving.

The courses are organized for periods covering one, two, and three years each. Those who complete the three years' course are candidates for diploma.

THE INSTITUTO NACIONAL.

The following particulars relative to the recently established university, the Instituto Nacional, are taken from an account of the institution by the United States minister at Panama, who is deeply interested in the enterprise:

> This institution was built by the Panaman Government at a cost of about $1,000,000, United States currency, and finished just over two years ago. It is situated on the outskirts of Panama City, immediately adjacent to the zone boundary, and consists of a number of finely constructed and well-equipped buildings of stone and concrete. The buildings, as they are at present, would be sufficient for some 600 students, of whom some 350 might be lodged and boarded. Provision has, however, been made for raising the buildings another story if required, and if this should be done the number of students who could be accommodated would be considerably increased.

The institute experienced some peculiar difficulties during the experimental year, but in the summer of 1912 the Government secured the services of Dr. Edwin G. Dexter, who had formerly been chief of the department of public instruction in Porto Rico, and who had thus gained valuable experience in dealing with conditions similar to those in Panama. Under Dr. Dexter's administration the institute is making rapid progress. The number of students is at present about 400, all natives of Panama, of whom half live in dormitories. Tuition is free, and $20 covers the charge for board and lodging. The Government offers a number of scholarships, which are attained by competitive examination and entitle the holders to free board and lodging.

The courses of instruction at the institute are organized in three divisions:

(1) The lycée, which offers courses occupying six years, at the end of which the bachelor's degree is given to successful students. These courses are about equivalent to those of the less advanced high

schools in the United States. Provision has so far been made only for the first three years of the lycée course, as students are not sufficiently advanced for the higher classes, and no degree has yet been granted.

(2) The normal school, which has courses extending over four years. A practice school enables students to acquire experience in the art of teaching.

(3) The commercial school, which has only recently been opened.

While the Instituto Nacional is not at present a university, it possesses the buildings and a nucleus out of which in time a university organization may develop, and it is the desire of President Porras, publicly expressed, that it should become a central institution drawing students from Central America and South America. For this purpose, in his judgment, a chair of English literature and a library well supplied with modern works are indispensable. With such provision and a strong teaching corps, students would have the double advantage of coming under the influences of a modern university, while at the same time pursuing a Spanish curriculum in a Spanish milieu.

STATES OF SOUTH AMERICA.

INTRODUCTION.

The increasing relations, political and commercial, between the United States and the Latin American countries make it extremely important that there should be a clear understanding in this country of educational theory and practice in these sister Republics. With few exceptions they lack the essential conditions of an organized system of popular education, in particular the influence of a strong middle class, progressive and democratic, which in all modern States has proved the source and support of efficient systems of popular education. On the other hand, the leading class, or aristocracy, have a system of education which preserves traditions and ideals derived from the Old World. Higher education is greatly prized and well supported, and foreigners who come into relation with the official and professional classes are esteemed in proportion as they give evidence of that high culture which reveals itself in sentiment and manners. The universities and colleges, the two divisions of higher education, have a history extending from the colonial period to the present time. Six universities were established at different centers during the Spanish occupation, and in many of the States the early period of independent existence was marked by the creation of universities which became nurseries of new political and social ideals. At this time

French influences prevailed and led to the establishment, in several cities, of special schools for the promotion of science and art.

The patriotic leaders in the revolutions which freed South America from Spanish rule were animated by the doctrines of the revolutionary leaders in France, and adopted the same theories of popular education, but in the general absence of centralized authority these theories were put in practice only in the capital cities and in the districts reserved to governmental control. Every subsequent revival of interest in popular education has been limited to these centers, and the present efforts on the part of the leading States to educate their entire population are met with indifference and apathy, outside of a few progressive centers. In other words, there is no diffused public opinion and purpose in support of these efforts.

The three leading States of South America—Argentina, Brazil, and Chile—together have a population of about 30,000,000, or nearly two-thirds the entire population of the southern continent. Of this total, Brazil comprises about 18,000,000, largely concentrated in the Atlantic States, while the interior States are for the most part unsettled and undeveloped. The annual emigration from Europe to these countries is large, amounting for Brazil in 1912 to 180,182, of whom the majority were agriculturists from southern Europe. Argentina has been fortunate in drawing to her fertile lands colonies of German settlers.

The Commissioner's Report for 1912 presented a summary of primary school enrollment in the States of South America; at that time Argentina and Chile exceeded the other States in the proportion of their populations in primary instruction, namely, 9 per cent and 8 per cent, respectively. Later statistics have been received from a few States, but they do not show any marked changes in the relations. It is, however, unfair to regard the enrollment in primary schools as a measure of current activity in respect to education. A much better conception of what is really taking place in the several States will be formed by considering particular events, irrespective of the order or kind of education to which they refer.

There is a growing tendency among the States which have common interests to form friendly alliances. Thus Argentina, Brazil, and Chile have an informal relation popularly known as the "A B C Alliance," which increases their influence on the continent. By reason of their prosperity and political stability, they offer the best field for the spread of popular education; in these respects, however, Uruguay is equally fortunate, and therefore may be classed in the same group.

ARGENTINA.

In his message to the Congress at the opening of the current session the President of Argentina referred particularly to the educational outlook. On this subject he said:

> Public education proceeds with growing efficiency and volume in this city and in the Provinces. The number of schools is increased as the state of the treasury permits. The number of students grows annually, as the population increases. Primary instruction, the influence of which in the destinies of the nation is fundamental, is making steady progress. The National Council of Education does all that it can to facilitate the march of enlightenment. In regard to secondary education it still awaits the organic law which is to give it a permanent and satisfactory base. Doubtless during the present session this important matter will receive due attention. The congress of professors assembled in Cordoba on the 16th of February last contributed very materially to the political problem by the able manner in which it dealt with diverse themes of importance. The proceedings of the congress will soon be published and can not fail to prove a source of inspiration for all who take an interest in the educational work of the Republic.[1]

The year was marked by the congress on education organized at Cordoba, under the direction of the minister of education. In the discussions of the congress education was considered as an integral process, and the most pressing problems of popular education were given equal attention with those special to the higher provinces. Resolutions were adopted urging the desirability of establishing urban and rural schools, the increase of the number of normal schools, the employment of graduates as teachers, greater liberty for teachers in the management of schools, and a change in the curriculum and methods of teaching in the normal schools of the country.

Experts were recently sent by the minister of agriculture for the inspection of the experimental farms maintained in different parts of the Republic. The national school of viticulture has also been the subject of special investigation, and plans have been formed for its extension and better equipment.

In view of the rich agricultural resources of the State, measures have been proposed by the minister for the formation of agricultural colonies through the combined action of the Government, railways, and landowners. Application has also been made to the Department of Agriculture at Washington for the engagement of scientific experts to aid in the development of agriculture and rural economics.

BRAZIL.

Brazil has achieved distinction in the scientific world through the work of eminent savants, and the application of scientific knowledge to many social problems. The State of Sao Paulo, which, like the Federal district, can boast an excellent system of public schools, has in operation a model service of school sanitation and medical inspec-

[1] For a copy of this message the office is indebted to the Department of State.

tion. The chief of the service is Dr. B. Vieira de Mello, who is assisted by a State commission comprising 20 physicians, of whom 4 are engaged exclusively in the inspection of the schools of the capital, and the remainder are assigned to the interior cities and towns. The recommendations of the commission as to the choice of school sites, the location of schools away from factories, railroads, etc., and in proximity to public parks and gardens, have had great effect, and the city of Sao Paulo offers many fine examples of school edifices on choice sites, well equipped, and provided with laboratory facilities for the medical and psychological examination of pupils.

As an adjunct to the medical service Dr. Vieira de Mello has organized an independent society for the treatment of the dental diseases of the school children, "Associacão Paulista de Assistencia Dentaria Ascolar," which is offering free clinical service to the pupils of the public schools. Four schools of the city have been provided with dental offices by the society, and it is proposed to extend its operation into the interior of the State.

The organized system of agricultural education in Brazil has been extended during the year, under the law approved December 17,1912, by the establishment of schools of practical plowing, and five stations for the experimental culture of tobacco, cotton, and cereals.

CHILE.

Chile has a comprehensive system of education under central control and supported by Government appropriations. At each stage the public provision is supplemented by private schools, which are also partly supported by the State. The following statistics summarize particulars respecting the system as reported for 1911:

Statistics of schools and higher institutions, 1911.

Classes.	Number.	Teachers.	Pupils or students.
Primary schools:			
Public	2,896	4,829	375,274
Private, assisted	.....	.....	36,577
Total	.....	.....	411,851
Secondary schools:			
Lycées for boys	41	1,033	12,052
Lycées for girls	36		8,277
Total	77	1,033	20,329
Normal schools:			
Public	15	262	2,322
Private	[1] 1	.....	74
Special schools:			
Industrial for girls	29	236	4,084
Textile	[2] 14	.....	902
Commercial	10	.....	2,296
Universities	2	.....	2,685

[1] Belonging to the archbishopric.
[2] Maintained by the Society for the Development of Textile Industries.

In addition to the institutions included in the table, there is an agricultural institute of high grade, which enrolled 94 students in 1911, and six secondary schools of agriculture. At the capital are situated the well-known Pedagogic Institute, or Superior Normal School, the National Conservatory of Music, and a School of Arts and Trades. The Government maintains also an institute for deaf-mutes and a school for the blind. The appropriation for primary education in 1910 was 7,317,885 pesos ($2,671,028), the estimates for 1913 called for 7,689,000 pesos ($2,806,485), which was about 10 per cent of the total Government expenditures for the year.

Current activities with respect to education in Chile are directed mainly to increasing and perfecting the provision for industrial and technical training. Two commissions were appointed during the year by the Department of Industry and Public Works—one to investigate and report upon the agricultural schools of the country, and the second a commission of mining experts, to advise as to the exploitation of unworked mines and increased provision for training mining engineers. Subsequently a new school of mines was established at Copiapo. The sum of 30,000 pesos ($15,000) was also appropriated for the establishment of a practical school of agriculture at Rancagua, and an equal sum has been requested for the support of the industrial school already established by the Society for the Encouragement of Manufactures. The Eighth Scientific Congress of Chile, which was held at Temuco, the capital of the Province of Cautin, called special attention to the development of the commerce, agriculture, and manufactures of that city and the surrounding country during the past decade. This region, which 20 years ago was an almost impenetrable forest, is now "dotted with well-stocked ranches and farms in every direction, and produces an abundance of nearly all of the products of the Temperate Zone." The most important manufacturing industries of this Province are those connected with the lumber, milling, and tanning industries; although not lacking in mineral resources, these are as yet undeveloped.

The increasing demand for technical schools has fixed attention upon the inadequacy of the system of elementary education for present industrial conditions. The national congress on secondary education, in the session of 1912, adopted a declaration of principles which, if carried into effect, would unify the courses of instruction for primary and secondary schools, introduce manual training into the former, and organize practical departments in the latter. Although Chile is in advance of the sister States in respect to the professional preparation of teachers, the congress declared that there is pressing need of larger and more varied provision for this work, having

regard to the demand for teachers competent to conduct scientific studies and different forms of practical training.[1]

The minister of public instruction has taken measures to induce Chilean students who have secured a diploma in any of the higher branches of study to proceed to the United States with a view of continuing their studies in special directions. This action is taken under the conviction that such relations would promote the interests of the students themselves and would become a means of increasing cordial relations between Chile and the United States. The Boston Chamber of Commerce was formally requested by the minister to assist in "organizing a permanent committee" which would be willing to take charge of the enterprise in that city.

URUGUAY.

In a historical review of public primary education in Uruguay, Señor Pérez, vice president of the department in charge of this interest, recalls the indifference and contempt with which public schools were regarded by the leading classes in Uruguay in the early days of the Republic. A change in this respect was wrought through the efforts of José Pedro Carela, an inspector of primary schools in Montevideo in 1868. He organized a society of friends of popular education, and with their assistance conducted a vigorous campaign in behalf of the cause. He also drafted the organic law regulating primary schools, which was passed in 1877. Under this impulse Montevideo became a center of educational activity, but outside the capital the effort to maintain primary schools excited little interest until a recent date. The following table indicates the progress in this respect:

Primary schools in Uruguay.

Year.	Number of schools.	Pupils.	
		Enrollment.	Average attendance
1877	208	17,033	12,361
1894	515	47,356	36,018
1906	619	57,638	41,462
1910	1,010	74,717	54,106
1912	.....	87,548	62,065

Among the measures proposed for the present year was the establishment of two open-air primary schools at Montevideo, one for boys and one for girls. If the experiment proves successful, it is proposed to establish similar schools in other cities of the Republic.

The Government also made provision for a school of aviation,

[1] "Memoria del presidente de la Asociacion de educacion nacional, 1912," in Revista de educacion nacional, Santiago de Chile, April, 1913, p. 96–98.

fully equipped, under the direction of the war department. An Italian aviator, Signor Colteneo, was offered the directorship.

The budget of Uruguay for the fiscal year 1913–14 was fixed at ₱36,516,877. Of this amount, ₱3,193,132 ($3,295,322.22) was for public instruction.

PARAGUAY.

The serious purpose of the Government of Paraguay to extend and improve the educational system was manifested by the appointment of a commission in 1911 charged to investigate educational systems in the United States and Europe. The work of this commission has given a new impulse to educational activity in the capital city and the surrounding districts. A school for arts and crafts for girls has recently been opened in Asuncion under the patronage of the Society for the Protection of Children and the immediate direction of the Carmelite Sisters of Charity. The school has Government sanction and will probably be aided by public funds.

The agricultural interests of the country engage the attention of the Government, and measures have been taken for extending the practical work and influence of the agricultural college at Asuncion. For the present year the minister of public instruction recommends an item of 615,000 pesos ($307,500) for the botanical garden and further provision for the college.

In its excellent State normal school Paraguay possesses one of the essential conditions for insuring the success of plans for improving the elementary schools. This institution conferred diplomas on 39 students in 1912. The school is under the charge of able professors, and its influence is felt throughout Paraguay and in the neighboring States.[1]

"GREATER COLOMBIA."

The three Republics, Ecuador, Colombia, and Venezuela, which originally formed the Republic of Colombia, all have laws providing for systems of gratuitous primary instruction, and these are obligatory in Ecuador and Venezuela. Primary schools may be established by local authorities or may be parochial schools, but the latter must conform to official requirements. In all three of the Republics the Roman Catholic religion is recognized as a State religion, but entire freedom of conscience is guaranteed. The education laws also comprise provisions relating to secondary and higher education; the latter is under the control of the central Government in each State; the secondary schools, which are generally under clerical control, are subject to inspection if subsidized by the Governments. It is needless to recall at this time the political and social conditions that have

[1] For a recent account of this school, see article by Juan M. Ricci in Anales de Instrucción Primaria, Vol. XI, Nos. 1–15, 1913 (April, 1912, to June, 1913), published at Montevideo.

prevented the full exercise of the education laws in the States considered. At present they participate in the awakening on this subject, which characterizes the Latin-American States generally.

The former relations and the common interests of the three States are emphasized the present year by the arrangements for the Third Congress of Students of the Greater Colombia to convene at Quito, December 9, on the anniversary of the Battle of Ayacucho. This was the decisive engagement in the war of independence which freed these countries from Spanish rule.

COLOMBIA.

Colombia, with a population of five and a quarter million people, in 1912, reported 4,371 primary schools, with an enrollment of 272,873 pupils, or about 5 per cent of the population. Naturally the conditions of school attendance are most developed in the capital and commercial towns. The Government has recently taken measures for establishing schools for the native Indians in the territory of Arouca, and has approved a recommendation of the educational inspector of Putumayo and Caqueta for the establishment of 25 primary schools at specified points, to serve as models for the schools maintained by the local authorities.

The following table shows the number of primary public schools in each Department of Colombia and the distribution of the school fund recently provided by the Government for the current fiscal year, stated in American gold:[1]

Schools and school funds.

Departments.	Schools.	School fund.	Departments.	Schools.	School fund.
Antioquia	783	$496,760	Huila	113	$44,540
Atlantico	61	34,716	Magdalena	110	50,172
Bolivar	245	179,336	Narino	179	226,742
Boyaca	403	58,074	Norte de Santander	127	69,544
Caldas	278	175,512	Santander	414	.....
Cauca	168	50,741	Tolima	215	82,500
Cundinamarca	591	150,000	Valle	227	157,283

ECUADOR.

The organic law of public instruction for Ecuador, adopted in 1897, provides for a comprehensive system of education including three departments—primary, secondary, and higher. Primary schools are established either by the National Government or by local authorities. They are subject to Government inspection, and must provide instruction in civics, morals and religion, reading, writing, political geography of Ecuador, elements of Spanish grammar, elementary

[1] Statement forwarded by Mr. I. A. Manning, United States consul at Barranquilla.

arithmetic, history of Ecuador, and politeness; also for girls, cutting and sewing garments, and domestic arts.

The organic law was modified by a law of 1912, which provides for the organization of the superior council of education and for more effective supervision of schools throughout the State. The superior council is an advisory body upon which the different orders of education are represented by members elected by their colleagues. This council considers the subjects submitted to it by the minister of public instruction, and advises with him as to needed reforms. The law of 1912 requires local authorities to make provision for the instruction of adults, and also for the introduction of manual training in the primary schools and for classes in manual arts and various crafts for workmen.

The following table summarizes the statistics of primary and secondary schools, 1912–13:[1]

Statistics of primary and secondary schools in Ecuador.

Class of schools.	Number of schools.	Number of teachers.			Number of pupils.		
		Men.	Women.	Total.	Boys.	Girls.	Total.
Primary:							
Public	1,320	1,387	1,352	2,739	42,171	33,744	75,915
Private	92	129	267	396	4,354	6,751	11,105
Total	1,412	1,416	1,619	3,135	46,525	40,495	87,020
Public normal	3	22	23	45	104	349	453
Secondary (colegios):							
Public	12	96	.....	96	1,282	.....	1,282
Private	7	59	.....	59	634	.....	634

In addition to the schools included in the table, there are three commercial schools with 204 students, and one agricultural school with 22 students. The university faculties reported for the same year 437 students.

VENEZUELA.

Venezuela, although not on the level with Argentina and Uruguay in the actual provision of schools, is proceeding very systematically with the work of reorganizing its entire system. This endeavor was preceded by investigations of the school systems of foreign countries, and thus Venezuela has had the advantage of recommendations drawn from experience, but adapted to the actual conditions in that country. A *memoria* submitted to the national congress at the current session by the minister of public instruction details his plan for a reform of primary education, which, in his judgment, is of first importance. The memoria dwells upon the importance of instructing teachers in the principles of science and the industrial arts, and of inspiring them

[1] From a statement furnished by the statistical division of the department of public instruction.

with interest in the improvement of farming and ordinary industries and the better management of humble homes. The introduction of manual training and of physical culture in all the elementary schools is urged, but with full recognition of the fact that this can not be successfully done without the services of a new order of teachers.

The minister urges also that a school census be taken periodically, and that a competent corps of school inspectors, in sympathy with the new plans as well as with the conditions of childhood, be employed.

The report of the minister is not limited to elementary education, but covers equally secondary schools and higher institutions. With respect to the former the extension of the programs to include physical science is recommended and the organization of a higher normal school, as an annex to the Liceo Nacional, for the training of professors competent to give this new direction to secondary studies.[1]

Statistics for 1912 show a total of 1,367 elementary schools in the State, with 43,579 pupils, and 102 secondary schools, of which 58 are for boys, 38 for girls, and 6 mixed. There is an excellent normal school for women at Caracas, the capital, and a similar school for men at Carabobo, each of which has a practice school annexed, comprising first and second grade pupils. Of the secondary schools 34 are maintained by public funds, and of the remaining number 21 are subventioned by the State.

The secondary course of study comprises four years and leads to the bachelor's degree. As a rule commercial courses are maintained in the secondary schools.

The capital city is the seat of the Central University, and also of the National Academy of Fine Arts, College of Engineers, School of Arts and Crafts, Military Academy, and a nautical school.

Higher education is represented by separate faculties of letters and philosophy, of law and special sciences, etc., which are not organized into a university. There are also many schools of arts and trades for working people, directed by religious orders. Twenty-one normal schools have been established in 13 different departments. There is a school of fine arts at Bogota and schools of mining at Medellin and Pasto.

The total Government expenditure on education in 1912 amounted, in round numbers, to $1,700,000.

BOLIVIA.

Bolivia has enjoyed a period of tranquillity and prosperity, but two conditions have prevented progress in popular education: The population is three-fourths Indian, or mixed, and outside the capital city the maintenance of schools is left wholly to the local authorities. The larger villages have schools, but they are held in miserable buildings,

[1] Memoria, Ministro de Instruccion publica, 1913, vol. 2, Appendix XVII.

often without desks or other equipment, and in charge of teachers untrained and even ignorant. The entire number of primary schools—public, parochial, and private—in 1912 was 990, with 81,336 pupils. Secondary education is given in colleges, public and private, numbering altogether 31, with 180 teachers and 2,177 pupils. The instruction in the latter schools is mainly theoretic, excepting in the commercial courses, which form a feature of the secondary programs. Efforts for the improvement of popular education were begun under the former President, Señor Montes, who during his administration, 1905–1909, sent a commission to Europe to study the organization of public instruction in various countries, with a view to the development of a system adapted to his own. The commission was in charge of Señor Bustamente, who, upon his return to his native land, was appointed minister of public instruction and proceeded to elaborate a plan for educational reform. The normal school, created at Sucre, was established in accordance with the recommendations of the minister and was modeled directly upon the normal school at Brussels, which, under the direction of M. A. Sluys, had gained wide distinction. The present director of the new institution, Dr. G. Rouma, was called from Belgium to take charge of the enterprise. Under his direction the school has been the means of creating a center of sound pedagogical teaching whose influence is felt not in Bolivia alone, but in neighboring States of South America. Dr. Rouma is well known also for his researches, which have made important contributions to the pedagogical literature of the world. The following statistics, taken from a recent report of the director, show the development of the school during the brief period of its existence.

Statistics of the normal school at Sucre.

Years.	Students.			Appropriations.
	Boys.	Girls.	Total.	
1909	28	.....	28	$11,670
1910	35	9	44	15,560
1911	35	18	53	32,377
1912	44	41	85	48,528
1913	50	50	100	50,570

The normal school occupies an imposing building affording a fine view of the city of Sucre, and comprises, besides classrooms, a library and laboratory facilities. The teaching corps consists of 16 professors, of whom 4 are Belgians. Young women were admitted in the second year, the Government having sanctioned the experiment without giving it official recognition. Opposition, however, has been disarmed, and the coeducation plan was officially adopted at the close of 1912, up to which time the young women had been simply recog-

nized as hearers. With respect to the effect of this policy Dr. Rouma says:

> The mere presence of young women in the normal school has made the young men much more sociable, softened their rude manners, and imparted to them politeness and due regard for their personal manners and appearance. On their part the young women have been notably benefited by the relation. They have gained assurance and independence, and have ceased to be timid and frivolous.

The course of study in the school is arranged for four years, of which the first two are devoted to general culture, and the last two are strictly professional. Music and the fine arts form important features of the general course, and musical societies are formed by the students, who give fine concerts on fête days. The professional course is highly developed in the direction of experimental psychology and pathological pedagogy.

The practice school annexed to the normal is provided with gardens, which are cultivated by the children and the student teachers. There is also an experimental garden at the service of professors of agriculture and allied sciences.

The following particulars, taken from the report by Dr. Rouma, illustrate the difficulties attending the effort of ambitious young people of Bolivia to profit by this provision:

> In November and December, 1911, I was traveling over Bolivia in company with two professors from the normal school, holding in the capital of each Department a series of conferences upon the scientific basis of education and the purposes of the normal school at Sucre. This series of conferences awakened great interest in the new institution, and resulted in numerous demands for admission thereto. The Department of La Paz sent ten young women, under the direction of a woman chosen by their parents and with the sanction of the Government. The Department of Oruro took similar action. Several cities sent important contingents, so that the very first year it was necessary to duplicate several courses. In order to convey some idea of the difficulties attending the journey of these groups of young women from La Paz to Oruro and the normal school, it should be explained that in December, the time of the journey, as the school year opened in January, the roads are partially destroyed by the rains, and consequently these young women had to travel for five days on the backs of mules across the cordilleras, sleeping at night in Indian cabins, and traveling during the day under the hot sun and across desolate country. What matter? They sang as they traveled, encouraging each other, strong and courageous. The enthusiasm was contagious, and several teachers abandoned their situations in order to come up to the normal school and pursue pedagogical studies.[1]

PERU.

The movement for reorganizing the system of education in Peru, which was started in 1909, has made comparatively little progress on account of political changes. The movement itself, however, stimulated activity in the capital and in other centers. During the present year the military school at Lima has been reorganized. Under

[1] Rouma, G. L'École Normale de Sucre. In L'École Moderne. Nos. 5–6, 1913 (May–June), pp. 233–258.

the new plans, in addition to the students who are entered for the entire course, companies of soldiers from the different divisions of the army, infantry, cavalry, etc., will be admitted at appointed times for military drill and instruction in tactics.

The National Agricultural and Veterinary School at Santa Beatriz reports for the present year the largest number of students ever admitted. The complete course of this institution covers a period of five years. Candidates for admission must meet prescribed educational qualifications, and must be between 16 and 20 years of age and physically sound; the training is gratuitous for students who have obtained scholarships by competitive examination. Other students pay a fee of $30 annually, plus laboratory expenses. The institution was established for the purpose of giving practical and scientific instruction in agriculture and veterinary surgery, in order to supply the constantly increasing demand for directors of agricultural enterprises and veterinary experts. A department of agriculture has also been established in the National College of San Luis Gonzaga at Ica. This department will offer a three years' course in agriculture, including theoretical instruction and practical work. An arrangement has been made by which native farmers have the advantage of free conferences with the professors on agricultural subjects and the right to attend demonstrations at the experiment farm at the college. Under a system of exchange, two Peruvian students were sent this year to Cuba to study agronomy, and two Cuban students were admitted to the University of Lima to pursue the mining course.

In his message to the Congress of Peru at the opening of the session, September 5, 1913, President Billinghurst set forth the need for public instruction and the immediate plans of the Government in respect thereto, as follows:

Lacking, as we do, a census taken with due regard to scientific precepts, it is not easy to determine the number of illiterates in the country, but even without this important information we must arrive at the conviction that public education, in spite of the large sums annually devoted to it, does not develop in harmony and in direct ratio with the increase of the population.

Given such a state of affairs, and while the public finances are improving, the problem relating to education consists of guaranteeing the results obtained by bettering them, as far as this depends upon the Government, in order to avoid an unprofitable stationariness or a retrogression that would bring about the ruin of public instruction.

The time is past when education was considered a remedy, a panacea, for social infirmities, and this erroneous idea has been replaced by the truer conception which accounts it a powerful and irresistible instrument for the development of the strength and skill of the worker, increasing the range of his intelligence and at the same time providing him with the means of profiting by the deep stream of universal acquired knowledge whereby labor and industry are rendered so fruitful.

Concurring with these ideas, and actuated by the dogma of true liberalism, which recognizes that the duty of the State is to develop the conditions of civic activity and

incline toward the formation of the individual character in order to prevent opportunity becoming a monopoly and activity being converted into a patrimony of the rich and fortunate, the Government is determined to remove all obstacles in the way of the ample and effective diffusion of primary education in all parts of the Republic, not only by giving more attention to the establishment of elementary schools, but also by creating night schools, which shall be in harmony with the needs and the limitations of the poor classes for which they are intended and in which he who can not read will learn, while he who can read will learn more and go further.

It is the intention of the Government gradually to open the gates of these schools not only to those who wish to learn, but also to such as are willing to teach what they know.

The social problem of endowing the woman with the means of earning her own living bristles with difficulties and must be based upon a broad and honorable margin, which signifies a work or occupation of real utility to society and one for which society shall be willing to pay, and in no case something which implies alms more or less disguised.

In pursuance of this ideal the Government has just established in the town of Magdalena the domestic training school, wherein instruction will be given to as many as 300 poor girls, of whom 200 are to be brought from the Provinces.

Although this step that has been taken in the direction of solving the social problem to which I am alluding satisfies immediate necessities, the Government is aware that the action of this education will have to be extended to the Provinces, and with this end in view it is proposed to add to the curriculum of the girls' schools in the provincial capitals a complete course of training in the domestic arts, whereby each pupil will acquire the knowledge indispensable for the management of her own home and for service, adequately rewarded, with respectable families.

The Government further proposes to establish in the boys' elementary schools courses of practical arts in order that at a certain age the boys may learn to be carpenters, tinsmiths, metal workers, etc.; in short, that they may acquire the knowledge necessary to present-day life, yet without being condemned to become mere day laborers.

In the opinion of the Government all these reforms and amplifications of primary instruction can be carried out within the limits of a carefully planned administrative budget and without the necessity for augmenting the expenditure upon this public service.

While urging the paramount importance of public instruction, President Billinghurst calls attention to the great increase of expenditure for this purpose during the last two decades and the need of more careful adjustment between appropriations and actual expenditures. In 1912 the estimates for public instruction called for £336,049.2.60 ($1,633,199); the expenditures for the same year amounted to £306,598.8.24 ($1,490,070).[1]

Institutions for Higher Education in States of South America.[2]

ARGENTINA.

Buenos Aires.—Universidad Nacional (1821). Rector: Eufemio Uballes. Students in 1911, by faculties: Law, 1,100; medicine, 2,500; pharmacy, mathematics, and natural sciences, 600; philosophy and letters, 250; agronomy and veterinary, 200;

[1] From the message of Señor Don Guillermo E. Billinghurst, President of the Republic of Peru. The Sun, Nov. 26, 1913.

[2] Derived mainly from Minerva, 1912–13.

total students, 4,650. National library of 143,500 volumes. Income, 1910, $1,525,000, of which $1,000,000 was from the public treasury.

Cordoba.—Universidad Nacional (1613). Rector: Dr. Julio Deheza. Faculties: Law, social science, medicine, exact science, natural science. Total students, 581 (1911–12). Library of 32,500 volumes, museum, and observatory.

La Plata.—Universidad Nacional (1906). President: Dr. Juan C. Delfino. Students, about 800.

BOLIVIA.

La Paz.—Colegio de Abagados. Courses in law, medicine, and commerce.

Sucre.—Universidad Mayor de San Francisco Xavier (1623).

Sucre.—Instituto Medico Sucre (1895). Director: Dr. Manuel Quellar. Museum of anatomy and natural history; laboratories, 3. Publishes a review.

BRAZIL.

(a) *Universities* (none.)

(b) *Other higher seats of learning.*

Bahia.—Faculdade de Medicina, Cirurgia e Pharmacia (1808). Director: Dr. A. Vianna; 680 students. Library with 10,000 volumes. Museum and 20 laboratories.

Bello-Horizonte.—Faculdade Livre de Direito (1892), subsidized by the State of Minas-Geraes. Director: Dr. Gonçalves Chaves; 22 professors.

Ouro Preto.—Escola de Minas (1875). Director: J. C. da Costa-Sena; 23 professors.

Pernambuco.—Faculdade de Direito (1875). Director: Dr. J. Tavares de Mello Barretto; 25 professors and 250 students. Library of 9,500 volumes.

Porto Alegre.—Faculdade Livre de Medicina, Cirurgia e Pharmacia. Director: Dr. C. Wallau; 29 professors.

Rio de Janeiro.—Faculdade de Medicina, Cirurgia e Pharmacia (1808). Director: Dr. Azevedo Sodré; 43 professors, 28 assistants, and 850 students. Library of 36,000 volumes.

Rio de Janeiro.—Instituto Psychiatrico. Director: Dr. Juliano Moreira; 24 professors and assistants.

Rio de Janeiro.—Escola Polytechnica. Director: Dr. J. B. Ortiz Monteiro; 32 professors, 27 assistants. Library of 40,000 volumes.

Rio de Janeiro.—Faculdade de Sciencias Juridicas e Socias. Director: Dr. Bulhões Carvalho; 17 professors. Library.

Sao Paulo.—Escola Polytechnica de Sao Paulo (1894). Director: Dr. A. F. de Paula Souza; 41 professors and 170 students. Library of 5,370 volumes.

Sao Paulo.—Faculdade de Direito. Director: Dr. Dino Bueno; 27 professors, 550 students.

Sao Paulo.—Escola de Pharmacia. Director: Dr. Amancio de Carvalho; 17 professors, 14 assistants, 190 students.

CHILE.

Santiago.—Universidad de Chile (1743). Rector: Domingo Amunátegui Solar. Faculties: Theology, law, mathematics and natural sciences, philosophy and arts, medicine and pharmacy. Professors, 105; many assistants, and about 1,000 students. Library.

Santiago.—Instituto Pedagógico de Chile (1889). Director: D. Amunátegui Solar; 13 professors and 180 students. National library, 7,115 volumes.

Santiago.—Universidad Católica (1888). Rector: Rodolfo Vergara Antúnez. Faculties: Law, mathematics and natural sciences, letters and arts, architecture and fine arts, agriculture and industry, courses in engineering. Students, 650, not including those in the humanities. Library, 36,800 volumes.

ECUADOR.

Quito.—Universidad Central de Ecuador (reorganized 1895).

Quito.—Academia Ecuatoriana. Director: Excmo. Carlos R. Fobar. Library, 2,000 volumes.

PARAGUAY.

Asuncion.—Universidad Nacional (1890) developed from former national college.

URUGUAY.

Montevideo.—Universidad. Faculties: Medicine, law, and mathematics; Professors, 83; assistants, 36; and about 800 students. Also schools of commerce and of veterinary surgery. Library of 44,500 volumes.

CHAPTER XXXII.

GREAT BRITAIN AND IRELAND.

CONTENTS.

England and Wales: Current educational movements; a national policy in education; proposed legislation.—The financial burden.—The religious difficulty.—Provision for advanced education.—Higher elementary schools.—Secondary schools.—Measures relating to teachers.—Activities of local authorities.—Associations.—A sweeping criticism; a rejoinder.—Statistical summary.—Notes on higher education.

Scotland: Current educational movements.—Supplementary classes: Purpose; scope; statistics.—Continuation classes: Organization; statistics; the system at Edinburgh.—Secondary education: Government measures; present state.—Medical inspection of schools.—The Educational Institute of Scotland.—Statistical summary.

Ireland: Proposed legislation.—Educational administration.—National elementary schools; progress; expenditure on schools and teaching staff.—The Irish Technical Instruction Association.

ENGLAND AND WALES.

CURRENT EDUCATIONAL MOVEMENTS.

The current year promises to be a memorable one in the educational progress of England. The highest ideal of a national system, and the largest plans for its realization, have been proclaimed by the Government at the very time when local authorities are making a stand against the increase of the local school tax. Outside official circles, there have been multiplied expressions of approval of the elementary school, but these have been met by sweeping criticism. The events of the year are, therefore, not only interesting in themselves, but even more so for the evidence they give of impending changes in the spirit and conduct of the State-aided system of education.

A NATIONAL POLICY IN EDUCATION.

All educational questions and discussions of the year sink into insignificance beside that of a national policy in regard to this interest, which has been announced as a part of the program of the present Government, and which was outlined in a masterly way by Viscount Haldane, Lord Chancellor of England, in a speech before the Manchester Reform Club, January 10 of the current year. This address made profound impression at the time throughout England. It has been widely quoted and translated, and has been accepted by leading statesmen in other countries as a charter of education for democratic nations.

The substance of Lord Haldane's Manchester speech has been reiterated by him on several occasions during the year, particularly in the meeting of the National Union of Teachers, but in each case with modifications suggested by the occasion. The essential features of the address are given in an article by the author himself, contributed to Hearst's Magazine. The following citation from that article comprises the principles set forth by Lord Haldane, which are of universal application to democratic nations:

Of all the social problems that have still to be grappled with in the British Islands, in England especially, there is none comparable, in magnitude and in the directness of its bearing on the national and individual well-being, to the problem of educational reform. When you are dealing with that you are dealing with something that is fundamental, and that includes and will help to solve all other questions.

Next to the material means of subsistence, there is nothing so interwoven with the sources of a national power as the quantity and quality of our national intelligence. On it depends not merely commercial success, but every hope we cherish for an ampler democracy.

In Great Britain we are a democracy in form and to a considerable extent in our political arrangements, but so long as there is no equality of educational opportunity for the son of the poor man and the son of the rich man we can not be said to be a democracy in fact. The teacher is the great leveler, and his function is not to level down, but to level up. When every boy and girl in the United Kingdom feels that, so far as the State can furnish it, he or she has a fair chance of acquiring the knowledge that is essential to the accomplishment of the best things in life, you will find that the barriers between class and class will insensibly begin to wear away, that the distinction between manual workers and brain workers will lose its accent of social prejudice, and that all ranks will draw nearer together in sympathy and understanding, through the consciousness that the career has been thrown fully open to talent. A true system of British national education is something that I regard as absolutely vital to the whole democratic movement in our country; and it is nothing less than this that the Government intends to set about establishing next year.[1]

In respect to Lord Haldane's speech at Manchester, Prof. Sadler said:

At last a British statesman of the first rank in public affairs has announced that the Government means to focus the thoughts of the nation upon the right upbringing and training of the younger generation. And the announcement is made, not on the authority of the speaker alone, but after consultation with the Prime Minister, the Chancellor of the Exchequer, and the head of the education office. * * * What has happened among us during the last few years is a new kind of revolution, but a revolution none the less. Education, generously understood, boldly planned, and administered with sympathy and intelligence, is the formula which will secure national safety and national health. Lord Haldane may be the Wilhelm von Humboldt of our day. * * * This is what they have been waiting for—a determined effort on the part of the Government of the day to make England a more hopeful place to grow up in, and to lay plans which, patiently pursued for 20 years, may not only make English people the most intellectual and competent in the world, but (what matters far more) kindle in their hearts a spiritual and social ideal. * * * English education is not dead, but alive. It has never been so full of life as it is to-day; but it needs a focus. And the true focus of every great educational movement is a vision of a new way of life.[2]

[1] Hearst's Magazine, Nov., 1913, pp. 748–749.
[2] The School Government Chronicle, Feb. 1, 1913, p. 122.

PROPOSED LEGISLATION.

The prospect of a new education bill to which the Government was fully committed last year has determined the points of chief interest in the current record. Discussions and efforts have naturally been directed to features of the system of education, which, it is thought, will be, or should be, modified by new legislation.

The system of public or State-aided education, it should be said, has been greatly extended since the passage of the education act of 1870. Many schools and higher institutions of older date have been brought under Government direction; so that elementary education in England must be regarded as a division of a general system, loosely organized it is true, but comprehensive in scope and with increasing interrelations between its different parts. It was expected that the promised bill would deal with the system as a whole, but with special reference to needed reforms in the province of elementary education. The disappointment was therefore keen when, in July, after many months of agitation and suspense, the bill submitted to the House of Commons proved to be merely a one-clause financial measure providing for the administration of a new grant amounting to £150,000 ($729,000). Of this sum £100,000 ($486,000) was to be applied in aid of loan charges for building purposes, and £50,000 ($243,000) for medical services.

It was admitted that the proposed sum would suffice for the immediate relief of the financial burdens of the local authorities, and in his speech supporting the bill Mr. Pease, president of the board of education, promised a comprehensive measure at the next session providing for what was popularly termed "a colossal scheme of national education." Within a month, however, just as the education authorities had become reconciled to the simple prospect of immediate relief from financial strain, their hopes were disappointed by the dropping of the bill. This action was taken in view of the avowed intention of conservative leaders to oppose the bill on account of controversial matters it contained. These did not appear on the surface, but since the objection could be sustained, the bill violated the principles governing financial legislation.

Although the appropriation to which the bill related had been granted in the estimates, it appeared that the part applicable to loan charges had been conditioned upon its passage, and therefore would not be available. No other measure dealing directly with education in England was submitted during the session; hence the general situation is unchanged and the agitation over present conditions continues. The main causes of disturbance are: The financial burden borne by the local authorities, the religious difficulty, and the lack of high schools open to all classes of children. Throughout the year these subjects have been kept before public attention.

THE FINANCIAL BURDEN.

The financial stress, which for the time overshadows all other considerations, is due in part to the inevitable increase in the number and scope of elementary schools, and in part to welfare services that have been imposed upon the school authorities by Parliament. The grounds on which the local authorities are clamoring for increased aid from the exchequer are summed up by the executive committee of the county councils association as follows:

* * * This committee (I) records its sense of the unfairness involved in the administrative policy of the board of education with regard to elementary schools since 1903, whereby (*a*) the standard of building requirements has been advanced, (*b*) the standard of school staffing has been appreciably raised, and (*c*) additional duties and obligations have been imposed on local education authorities as regards medical inspection, without corresponding increase in the imperial contribution in respect thereof; (II) urges that the restriction of the special-aid grant to autonomous areas and its refusal to rural parishes where the education rate, including special levies, exceeds 1s. 6d. in the pound, imposes an unequal and oppressive burden, particularly upon the agricultural industry; and (III) urges the necessity of providing adequate relief in the estimates for the ensuing year, either by a contribution in aid of capital expenditure (past, present, and future) upon school buildings, or by such other means as will lessen a burden which invites daily increasing opposition by ratepayers to all proposals for further advancement and progress in educational work.

In the debate in Parliament over the education vote, it was stated by Sir Henry Hibbert, representing Lancashire County, the largest in the Kingdom, that in the period 1907–1912, out of a total increased expenditure of £921,508 ($4,607,540), the Government had only contributed £100,225 ($501,125), and that the proportion of expenditure contributed by the Government for higher education was relatively still smaller; whereas in the earlier year the imperial exchequer furnished 55.5 per cent for this purpose, its proportion had fallen to 44.5 per cent. No criticism was made of the purposes which have caused increased expenditure, but the demand that the Government shall assume a larger share in this increase is insistent and it is heartily supported by the present chief of the board of education.

Among welfare activities the obligation to provide medical inspection brings heaviest expenditure upon the local authorities. Nearly a thousand medical officers are already employed for this service, and 700 nurses as aids in caring for sick children; there are above 30 local education authorities which contribute to hospitals for the needed care of poor children enrolled in the schools. School colonies were maintained last year by 56 authorities, and 229 out of a total of 317 authorities incurred expenditure for the treatment of sick children. The cost of this work was borne almost entirely by the local authorities; of a total expenditure amounting to $839,000, the Government contributed only $250,000. It is understood that the additional £50,000 ($243,000) for this service, which was in-

cluded in the estimates for 1913, will not be lost by the withdrawal of the education bill.

THE RELIGIOUS DIFFICULTY.

The religious question, which is a hindrance to the free development of the elementary schools, presents in this relation several different aspects. The church has large vested interests in the voluntary schools, which, it is claimed, justify the demand that they shall continue to give denominational instruction; but in many parishes there is only a parochial school, and in view of the church teachings the Nonconformists demand exemption from the school tax in such cases; further, the teaching force of the schools of the established church is recruited from its adherents, which closes a large proportion of all the positions to the Nonconformists. With regard to this matter it was stated by Mr. Pease in his forecast of a comprehensive act that the Government would be bound "to redress the balance between the parties which was heavily weighted by the act of 1902." Voluntary schools (i. e., denominational) would still be retained as part of the educational supply, but the grievances of the Nonconformists, which are mainly, though not exclusively, experienced in "single school areas" (i. e., areas having only a parochial school), would be remedied.

In this connection it is interesting to note that the acute stage of the controversy respecting church and civic control of schools seems to have passed, and a more conciliatory spirit is manifested by leaders on both sides. It is generally recognized that the Nonconformists have a just cause for grievance, and here and there experiments are made to meet their wishes with regard to religious instruction in parochial schools; meanwhile many church schools are passing over into the charge of the local authorities. The change in the distribution of population has had much to do with the change of sentiment on this disputed question. It has been said that "in Wesley's time England was a country of villages; now it is a country of great cities and of congested urban areas." This change has rather diminished than increased the strength of the Nonconformists. It is further noticeable that, while there is greater indifference than formerly in England, the vast majority of parents evidently desire religious instruction in the secular schools to which they send their children. Hence the idea of establishing a purely secular system of schools meets with little favor.

PROVISION FOR ADVANCED EDUCATION.

The meager provision for prolonging the education of the mass of children is due to two causes: Established social distinctions and the educational indifference of the working people. These extreme conditions are yielding to the force of democratic principles and deeper insight into the conditions of industrial prosperity; but institutions and social habits are not readily changed, and the present endeavors for extending the education of the common people show plainly the struggle between old ideals and new demands, and at the same time a desire to conserve existing agencies and adapt them to the present needs. These endeavors take two directions: First, that of extending the scope of elementary education by establishing higher elementary schools; second, that of opening secondary schools to able pupils from the elementary schools.

HIGHER ELEMENTARY SCHOOLS.

The higher elementary schools belong, as the name implies, to the elementary system. Their course of study includes the branches taught in the lower schools, with special instruction bearing on the future occupations of the pupils.

The official regulations prescribe a minimum standard for premises and equipments, and restrict the number of pupils in a school of this grade to 350 and the number habitually taught in a class to 40. Admission is limited to children who "are over 12 years of age at the date of admission, and have been for at least two years under instruction in a public elementary school." Every pupil admitted must begin with the first year of the course, unless authorized by the Government inspector to enter at a higher stage.

The teaching staff must be approved by the board as sufficient and suitable for giving the instruction required by the approved curriculum.

The schools of this grade receive the grant allowed to elementary schools in lieu of fees for all pupils under 15 years of age, and the aid grant based upon average attendance, together with the following:

For each unit of average attendance of scholars in the—	Shillings.
First-year course	30
Second-year course	45
Third-year course	60
Fourth-year course (when sanctioned)	60

It is admitted by the board of education that only a minority of the higher elementary schools are satisfactorily fulfilling their purpose, and in his address on presenting the financial bill the president of the board of education expressed the opinion that the "Cockerton judgment," which prevented anything like higher education being

given in the elementary schools, should be abolished. This need is felt, he said, "in the rural districts where there is no opportunity for the children to go to secondary schools."

The following statistics show the growth of the higher elementary schools in a half decade. The enrollment is included in the total enrollment given in Table 1, page 738.

Enrollment in the higher elementary schools.[1]

ENGLAND.

Years.	Number of higher elementary schools.	Number of scholars on registers on last days of school years aged—							
		10 and under 11.	11 and under 12.	12 and under 13.	13 and under 14.	14 and under 15.	15 and under 16.	16 and over.	Total.
1906–7	35	22	551	2,821	3,140	1,588	419	40	8,581
1907–8	35	2	69	1,142	3,660	2,038	708	51	7,670
1908–9	40	.....	29	1,014	4,070	2,581	901	152	8,747
1909–10	45	16	57	1,123	4,239	2,943	977	170	9,525
1910–11	38	.....	12	713	3,195	2,251	896	58	7,125
1911–12	41	.....	8	815	3,387	2,314	946	59	7,529

WALES.

1906–7	4	2	30	301	419	219	138	93	1,202
1907–8	4	3	26	164	402	214	133	106	1,048
1908–9	4	.....	5	151	371	229	114	103	973
1909–10	7	.....	10	250	597	289	125	111	1,382
1910–11	9	.....	.....	260	866	359	146	96	1,727
1911–12	10	.....	.....	241	949	389	149	103	1,831

[1] Board of Education, Report for the Year 1911–12, issued in 1913, pp. 48, 60.

The decline in the number of higher elementary schools in England in 1910–11 below the number for 1909–10 is due to the withdrawal of the London schools. This city now maintains 42 central schools with accommodations for 13,944 pupils, and it is proposed to increase the number of schools up to 60. Manchester had 6 central schools in 1911, with 2,956 pupils enrolled. These cities have surrendered the extra grant for higher elementary schools, complying with the official regulations, for the privilege of conducting the schools as local conditions seem to require.

SECONDARY SCHOOLS.

Secondary schools in England are divided on the basis of their management into three classes: Endowed, proprietary (maintained by stock companies), and private (under individual ownership and direction). As regards scholastic scope, the following classes are recognized: (1) Schools intended to retain pupils up to 14 years of age; (2) those which are intended for pupils who remain in school to 16; and (3) schools that prepare for admission to the universities and provide an extended course of study for pupils up to 18 years

of age. The secondary schools differ radically from the public elementary schools. They are not free schools, and up to a recent date they were not accessible to the children of the industrial classes.

These various classes of secondary schools were the subject of several Government investigations prior to the passage of the education act of 1902, but this act was the first measure adopted by the Government which included in its scope both elementary and secondary education. Under the second part of this act local educational authorities were authorized to take such steps as they deem desirable "to supply or aid the supply of education other than elementary" in their respective areas. The pressure of public opinion and the insistent demand of the industrial classes forced the authorities to enter at once upon the duties thus imposed.

Out of this necessity there has developed a system of free secondary education dependent upon the combined action of the board of education, the local educational authorities, and the managers of secondary schools. The principal features of this system are as follows: The board of education offers grants for secondary schools complying with the official conditions; the local authorities provide scholarships covering the cost of tuition in a secondary school, and often the personal expenses of the holder; the individual schools make formal application for recognition and agree to submit to official inspection.

In 1911–12 there were in England and Wales 995 secondary schools that had complied with the grant conditions, attended by 165,617 pupils. Of this number, 52,583 pupils were receiving free instruction, including 49,120 who had been transferred from the elementary schools.

Dissatisfaction with the present provision for continuing the education of children beyond the elementary stage is intense in the chief cities, in which the democratic spirit is most active, and in parishes which have neither higher elementary schools nor secondary schools easily accessible to children of the elementary-school class. The feeling on this subject is indicated by the proceedings of various bodies, which will be presently considered.

MEASURES RELATING TO TEACHERS.

Special interest attaches to measures recently adopted by the board of education looking to improvement in the preparation of teachers of elementary schools.

The arrangement by which young people who formerly served as pupil teachers may now continue their education in secondary schools insures a broader culture for the future teachers than was possible under the old system; at the same time it tends to relieve the training colleges, more and more, from purely academic work. The regulations for the training colleges issued by the board of educa-

tion for 1913 depart from the narrow spirit of former requirements. This is shown in respect to the two-year course of the college, which leads to the lower diploma, as well as in regard to the third-year course, which is open to candidates seeking advanced certificates. The general purpose of the regulations is to increase the time given to professional studies, and to lessen the pressure of examinations.

The official circular on the subject explains that the board hopes to secure this end—

(*a*) by reducing the number of subjects which students are required to study as part of their general education; (*b*) by reducing the amount of ground that has to be covered in the case of some of the syllabuses; (*c*) by providing for one examination only (instead of two as hitherto) in those cases in which students take advanced work in a subject in addition to the ordinary work; and (*d*) by allowing more freedom as to dividing the examination as a whole between the first and second years.

The subjects of the training-college curriculum are accordingly classified under three heads: Professional subjects, general subjects, and additional subjects. The branches under the first head are as follows:

Principles and practice of teaching, hygiene and physical training, theory of music and singing, reading and recitation, drawing, and needlework (for women). Theory of music and singing may be omitted by students who are incapable of profiting by practical instruction in music; and hygiene and physical training may be omitted by students taking degree courses in certain cases in which the requirement of these subjects together with the degree work would involve an undue pressure on the student's time. Apart, however, from these strictly limited exceptions, the board expect that the professional subjects as a whole should be studied by all students, whether two-year students taking an ordinary course or students reading for university degrees.

The general subjects are English, history, geography, mathematics, and elementary science. To this list is added Welsh in the case of Welsh colleges.

It is no longer required that every student shall study more than three of these subjects, and in certain cases the number may be reduced to two. Freedom in respect to this matter is left to the training-college authorities, subject to the one condition that some attention must in all cases be given to the study of English.

The additional subjects, which are optional, are intended for teachers of a special class or as a means of extending the general education of the student. This group includes French, German, Latin, physics, chemistry, botany, rural science, and housecraft. While great freedom is left to the college authorities in respect to the management of the course of study, the official regulations give valuable suggestions as to the use of this freedom. In particular, it is advised that a weak student, in addition to the professional side of his work, should confine his attention to the ordinary course in general subjects. On the other hand, opportunity is offered for a

strong student to follow the advanced course while pursuing the professional studies.

The examination for the teachers' certificate may take place at the end of the two-year course or be divided between the two years. The certificate will state the general subjects included in the course taken by the student, distinguishing between the ordinary course and the advanced course. The distinction between the two, that is the ordinary and the advanced, is defined in the regulations.

Certain training colleges with university affiliations are authorized to receive students for a three-year course of training, leading up to a degree in the university with which the college is connected.[1]

Recent regulations have also provided for an additional fourth year for students desiring an "honors course." In respect to this provision Mr. Pease, in his address on the budget, said:

> There has been in our training colleges, unfortunately, often too much pressure upon those who are endeavoring to do too much in their two or three years' period of training. If they have not only to secure a university degree, but pass examinations, and be properly trained to teach in the schools, four years, of course, is really a reasonable period in which to expect all this to be done, and the practice has been adopted in ten institutions of carrying out a four-year course—three years in connection with the work for the degree and in the fourth year preparation for the teaching profession. At the Universities of London, Manchester, Liverpool, Sheffield, Bristol (both men and women), Oxford, and in three Welsh colleges this arrangement has been arrived at with the boards, and success is attending the efforts which they are now making, and I am glad to say that while in 1911–12 the course was being taken by 410 students, there are in these colleges at present taking the course 781 students.

The measures pertaining to the preparation of teachers derive special importance from the fact that the Government grant for schools is conditioned partly upon the grade certificate held by the head teacher and the proportion of trained teachers employed. In the ultimate analysis, however, the local authorities determine the progress of education. Hence a survey of this interest, which is limited to Government activities, is incomplete and even misleading.

LOCAL ACTIVITIES.

The local authorities for education in England and Wales number 318, of which 63 are counties, 75 are county boroughs, 180 are boroughs or urban districts that have control of elementary education only. Upon these authorities rests, in the main, the provision of elementary schools, which now enroll above 6,000,000 children, employ a force of 185,000 teachers, and are maintained at an annual expenditure of $116,000,000. Of this amount the local authorities supply a little more than one-half, while for the promotion of higher education they contribute about $10,000,000 additional.

[1] See Board of Education. Regulations for the training of teachers for the elementary schools, 1913–14, ch. 6.

It is impossible here to do more than suggest the extent and variety of the work in charge of the education committees of a few selected counties and county boroughs.

London, which is an independent county, has a population greater than many kingdoms, and the education committee has under immediate supervision nearly 882,000 children, of whom about 750,000 are enrolled in elementary schools. For the maintenance of these schools the county expends nearly £5,000,000 ($23,300,000) annually. This amount covers many auxiliary services, such as the feeding of necessitous children. This provision is made in part by voluntary subscriptions, and the work is carried on by private societies; the council voted for this purpose for the current year £96,825 ($484,000). In a single month of 1911 meals were supplied to 41,134 children, and the total number of meals given in the entire year was 8,328,009. For the work of medical inspection the council expends about £27,000 ($135,000) annually, of which the larger part is raised from the rates (property tax). It should be recalled also that the county councils, through their education committees, bear a heavy expenditure for the promotion of higher education. For this purpose the London council expends over £1,000,000 annually, of which amount more than half is raised by rates.

The 70 county boroughs of England and Wales include the great manufacturing cities, Birmingham, Bradford, Bristol, Leeds, Liverpool, Manchester, Sheffield, etc., all of which make full provision of elementary schools and maintain also extensive and varied welfare activities, including medical inspection of pupils and medical treatment when necessary, provision of meals for necessitous children, and care committees to cooperate with juvenile labor bureaus in securing suitable employment for pupils leaving school for work. No attempt is here made to go into details respecting these activities in the great boroughs, as they are treated in extenso in a recently published bulletin of this office dealing with typical municipalities.[1]

The county council of Lancashire, the largest county in the Kingdom, is responsible for a population of 943,948. This, it must be understood, is exclusive of the independent county boroughs and urban districts. The following particulars relate to the elementary schools under the charge of the education committee for the year 1912–13:

Elementary schools, number, 704 (578 voluntary, 126 council).
Enrollment in 1912, 153,363; average attendance, 133,650.
Number of teachers, 4,207.
Expenditure, £497,492 ($2,417,811).
Sources of income and proportion from each:
Rates (property tax), 42 per cent of total; Government grants, 57.5 per cent; other sources, 0.5 per cent.

[1] Bulletin, 1913: Elementary Education in England, with special reference to London, Liverpool, and Manchester. I. L. Kandel.

In accordance with the requirements of the board of education, the education committee have undertaken to bring all the county school buildings up to a required standard. Of 205 unsuitable buildings, 139 have been dealt with, and it is believed that the 66 remaining will be put in excellent condition within a few months.

Medical inspection is extended to all schools under the committee, and during the year ending December 31, 1912, there were 62,184 children examined, and medical treatment was extended to 3,720 children suffering from various diseases.

Provision for industrial training, including handicraft, gardening, and housework for girls, is maintained in 436 schools, with 11,498 pupils.

The council has also complete financial responsibility for 10 endowed grammar schools, having a total attendance of 5,157 students. In this number are included 77 pupil teachers and 126 bursars, maintained by county scholarships.

The council is also doing an extensive work in the provision of special classes for teachers already in service; these include classes in school gardening, in physical training, vacation courses in cookery, light woodwork, rural science, drawing, etc. Instruction of a somewhat higher order, not exclusively for teachers, is provided in a county agricultural school, a dairy school, a county experimental farm, field trials at various centers, and a horticultural station at which elementary school teachers receive special instruction in the culture of garden plants, the care of orchards, and beekeeping.

MIDDLESEX.

(Population, 1,126,465.)

Higher education.

The secretary of the Middlesex education committee, Mr. B. S. Gott, has recently submitted a report to the education committee on the provision made in this county for higher education since 1907 in accordance with requirements of the board of education issued at that time. From this report it appears that in the period of six years—

five schools have been enlarged; a new school for boys, with accommodations for 300 pupils, has been built at Harrow; 2 schools for girls at Twickenham and Enfield, each with accommodation for 220, have been erected, as well as 6 mixed schools at Wood Green, Southgate, Finchley, Hornsey, Ashford, and Edmonton, of which 3 have accommodation for over 300 and 3 for over 200 children. In addition, mixed secondary schools have been opened in buildings originally intended for higher elementary schools at Finchley and Hornsey. Other plans now in process of completion are the erection of a new school for boys at Ealing and a new mixed school at Tottenham, for which tenders have already been accepted, and sites have been purchased for girls' and boys' schools at Chiswick, a mixed school at Hendon, and a girls' school at Harrow. Thus the only work now outstanding of the schemes sub-

mitted to the committee in 1907 is the provision of a school for girls at Ealing and 2 for boys and girls in West Willesden. Middlesex now maintains a total of 22 secondary schools, besides 3 which are aided by the committee. This splendid network of institutions seems adequate to meet even the very large increase in population which has recently taken place.

WILTSHIRE.

(Population, 286,222.)

Training in manual processes of agriculture.

In the previous reports of this series attention has been called to efforts for the uplift of rural communities promoted by the combined action of the board of education and fisheries and the board of education. Under the auspices of the two boards a rural education conference has been held annually for the last three years, each conference dealing with some particular phase of the rural movement. The conference for the current year pertained to manual processes of agriculture, with special reference to provision for training in these processes two classes of persons: First, children of elementary school age; second, boys and men employed upon the land. In preparation for the conference, numerous witnesses representing various aspects of agricultural industries as related to the desired instruction had been examined, and their evidence is included in the conference report. Among the witnesses was Mr. Corbett, county secretary for agricultural education in Wiltshire, one of the most progressive counties in respect to the rural uplift movement. The summary of Mr. Corbett's examination and evidence before the committee, as given in the report of the conference, is here cited.

Mr. Corbett, the county secretary for agricultural education in Wiltshire, stated that the Wiltshire County council had appointed two separate education committees, the agricultural education committee and the general education committee, and that to the former the county council had delegated all its powers and duties, under the education act of 1902, relating to agricultural education. He said it was his duty to organize the agricultural instruction throughout the county; he also supervised the work, as far as possible, in order to see that the regulations and instructions of the committee were being carried out. The instruction in manual processes is carried on at centers throughout the county, a local committee being appointed to arrange the work at each center. Mr. Corbett said that the usual method of procedure adopted is for him to write to farmers, estate agents, and others asking them to form a local committee for the purpose of arranging classes in their districts; sometimes, however, this process is reversed, the farmers making application to the agricultural committee for instruction to be given in their neighborhood. It is a rule of the agricultural education committee that a local committee shall consist of not less than 5 members, and in wide districts there are often as many as 20 members. The local committee usually acts for a single parish, but occasionally, as, for example, in the case of instruction in plowing, it may represent several parishes. Subject to approval, local committees may engage a skilled local man as instructor, such a man being paid at the rate of 30s. per week; but where none is available the agricultural committee, on application, provide an instructor. Mr. Corbett said that little difficulty was found in securing suitable instructors; if a competent man was not forthcoming in the county, he was

always able to obtain one from another part of the country. Instruction is given in hedging, ditching, plowing, thatching, and sheep shearing, both whole-time and part-time instructors being employed. A thatching instructor, who is competent to teach milking also, gives 10-day courses in these subjects. In the morning he instructs adults in milking, and takes boys from elementary schools from 10 to 12 o'clock in thatching. In the afternoon the boys and girls accompany the instructor to the afternoon milking and receive tuition from him, and it frequently happens that before the end of the 10 days they are able themselves to milk the whole herd of cows. Mr. Corbett said that farmers sometimes objected to having their cows milked by children, but when it was realized that the instructor was always present and was careful to see that the animals were properly milked these objections were withdrawn. No prizes are awarded to the children for attendance at these classes and they come in accordance with the wishes of their parents.

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Each course of instruction in manual processes lasts for at least 20 hours and is held on at least four days, and unless otherwise decided by the county secretary, a class consists of not less than six pupils, while nine is usually the maximum number. Competitions in manual subjects are held after instruction, it being necessary, except in the case of plowing, for the would-be competitors to have attended for at least 20 hours' tuition. The classes and competitions are usually divided into two or more sections, such as junior and senior classes; the juniors, as a rule, being persons under 20 and the seniors 20 years of age and upward. In hedging and ditching contests the competitors are required to deal with about one-half chain of hedge, in plowing they usually plow one-half acre of land, and in sheep shearing they are required to shear three sheep. The prizes in these competitions, which are provided out of county funds, are of the value 25s. first prize and 15s. second prize, while third and fourth prizes of 7s. 6d. and 5s., respectively, may under certain conditions also be awarded. Sometimes local prizes are also given. The judges are men well known in the county and reside outside the district where the competition is held. They are thoroughly acquainted with the practical side of the work on which they are making an award, having been, in many cases, champion prize winners in their younger days. They restrict themselves to judging the work done and do not point out, on the spot, mistakes made by competitors, though a report on the quality of the work is made by the judges at the dinner which usually follows a competition. Mr. Corbett said that these competitions were looked upon with favor by both masters and men, and the day on which they were held was regarded as a "field day" throughout the district. He said that the Wiltshire farmers in general were very pleased for their workmen to receive instruction, and as far as he was aware made no deduction from their wages on account of the time thus spent.

Mr. Corbett was asked whether the scheme of instruction adopted by the agricultural committee had covered the whole of the county within any definite period. He said that in his opinion this was not possible, partly because it would have proved too expensive, as it would have been necessary to engage several additional instructors, and partly because the committee did not press the instruction where it was not desired. On the other hand, classes were frequently held as many as four or five times in the same place when application was made by the local farmers, but in spite of this fact no complaints as to the unequal distribution of instruction had been made to the committee.

ASSOCIATIONS.

The National Union of Teachers, which held its forty-fourth annual conference at Weston-super-Mare in Easter week of the present year, is one of the greatest educational associations in the

world, comprising 72,400 members, belonging to 519 local associations, which are combined in 55 county associations. The majority of the members are teachers in the elementary schools, and the union itself was formerly known as the National Union of Elementary Teachers; in 1889, however, the word elementary was omitted from the title, and a fair proportion of secondary teachers are now included in the membership. The union exercises a very decided influence in regard both to legislation and to the official regulations issued by the board of education. Four members of the union are members of the House of Commons, where they keep close watch upon all measures affecting school matters.

At the annual meeting for the present year the subject of the general educational policy which the association is prepared to support was the chief consideration. The presidential address, which dealt exhaustively with the present state of education, summarized the principles for which the association stands, as follows: "Equality of opportunity for all, regardless of rank, fortune, or social status." While recognizing the great progress made in respect to the education of the children of the humbler classes, the president contended that there is still "a great gulf of prejudice and class exclusiveness dividing the schools of the rich from the schools of the poor." In this connection he said:

> We must first concentrate our attention on the primary schools and reform their conditions throughout. Until this task is accomplished there can be little or no hope of solid educational progress. Many ardent educationalists, whose sincerity and zeal are undeniable, take it for granted that the primary-school system is working very well, and focus their minds on secondary and university education. Primary education is not on a sound basis, and never will be until its administration is so organized that the conditions in the primary schools are as good as those in the secondary schools. This is the first point against which we should hurl our forces. When this position has been captured, the rest of the campaign will be comparatively easy.

Among the conditions in regard to which the primary schools suffer in contrast with higher schools are the smaller amount of air space accorded by the Government regulations to the primary schools, the absence of playgrounds, the indifference to sanitary conditions, and the inferiority of the teachers. On the last point the speaker said:

> The pupils in the secondary schools must be taught in every case by fully qualified teachers, while little more than half of the staff of the primary schools can be so described. Elaborate, and in many respects admirable, regulations have been drawn up for the training of primary-school teachers. The requirements for the professional diploma are most stringent, and the standard of attainments demanded is fully equal to that asked for the degree courses of many universities. Yet, having obtained its qualified practitioners the State restricts their sphere of usefulness. They are forbidden to cross the sacred portals of the secondary school, and at the same time a host of unqualified or partially qualified men and women is sent to compete with them in the primary schools.

Attention was also called to the fact that some measures have been made the means of injury to the children they were intended to benefit. This was illustrated by the misuse of an official circular issued by Mr. Runciman, when he was president of the board. This circular provided that no class should exceed 60 in number, but at the same time, it allowed a class of 60 to be under the charge of a teacher of low grade under certain conditions. Local authorities have taken advantage of this provision to the extent of employing supplementary teachers for classes of 60 children. The same circular required that there should not be more than 60 scholars in a class at any time. This was intended to be the maximum number, but here again some authorities have determined that it should be "the irreducible minimum" wherever the code permitted, hence follows what the speaker described as "a system of the most brutal and cold-blooded hustling." He said:

> Children are driven out of the infant school at the earliest possible age and in all departments frequent reclassification has become the order of the day. There are schools in England where every month, and sometimes oftener, scholars are shuttlecocked from class to class in order to preserve the idea of making the classes fit the room.

The president also urged the association to oppose all forms of the "half time system," including the provisions by which a country child is allowed to leave school a year before the town child, provided it can be shown that he is engaged in beneficial employment, by which is understood some agricultural work. The president observed that:

> The spirit of class prejudice is more vigorous and more widespread in the country than in the town. There the child of the agricultural laborer is in many quarters looked upon as a veritable Gibeonite, fit only to be a hewer of wood and a drawer of water.

As illustrating the dangers which lurk in such special provisions, he referred to a recent resolution of the Nottingham farmers' union with respect to which he said:

> This organization asks the State to sanction a system whereby children between the ages of 12 and 14 may be apprenticed to agricultural pursuits, and during this apprenticeship remain on the school registers and earn Government grants. The system will be nominally voluntary; but the pressure of those economic and social forces which only dwellers in the countryside can adequately realize will make it almost impossible to maintain this apparent freedom. We can therefore treat the program of the farmers' union as one for the establishment of universal agricultural apprenticeship in rural districts.
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> We have here the Gibeonite theory in all its pristine beauty and can form some conception of how regulations about "beneficial employment" are likely to be worked if the program of these magnates is accepted. Their motives may be of the best, but until they renounce their class exclusiveness and give their full support to the principle of equality of opportunity their motives will not count unto them for righteousness and

are only fit for what is the frequent end of good intentions. We can not and will not revive villenage, even for the sake of strengthening agriculture. All desire English agriculture to prosper, but the enslavement of the child is too heavy a price to pay. Let the farmers' union assist us to obtain equal educational opportunities for all, and its members will find that their support of a just and righteous cause will have its reward in raising agriculture to its true position among British industries. If a sound, liberal, and general education is good for "farmers' sons," the progeny of Hodge will be equally benefited by a similar mental development. Starving the brain does not increase the efficiency of the hand. When chambers of agriculture recognize this truth, then, and not till then, will the tillers of the soil and the artisans of the town be regarded as equals.

A large part of the address was devoted to exposing the low state of rural primary schools, and the farmers' union was particularly urged to assist the national association in the demand that these schools be raised to a higher plane.

In regard to schools for higher education the speaker pointed out that the fees in secondary schools do not make these institutions self-supporting, but they do erect an effectual barrier to the higher education of the workers' children. He continued:

There is only one way in which the danger can be averted. The ideal of Victor Hugo should become an accomplished fact in our country—"free and compulsory primary education for all, free secondary education for all who have the ability and the desire." The time has come to cease talking of the ladder from the primary school to the university. The welfare of the Nation demands, not a ladder, but a broad, firm, and well-laid highway, along which the poorest may travel if they possess the ability.

Association of education committees.—The opinions of the local education authorities with respect to matters of current discussion are brought out in the annual meeting of the association of education committees, which includes nearly all the urban areas of the Kingdom, Birmingham, Liverpool, and Manchester having joined the association the present year. The great purpose of this association is to influence legislation with respect to administrative policies. In the meeting for the present year, the three great problems that have been already considered were discussed from the local standpoint. The address of the president of the association, Sir J. Tudor Walters, M. P., dealt particularly with the present provision for continuing the education of the "million rather than the few." On this subject he said in part:

I notice that in regard to our elementary and secondary schools so many of the leading experts look at it entirely from the standpoint of everything being a ladder to the university. I do not agree with that standpoint at all. I do not want the conception of the education system in this country to be simply a process of taking a few bright boys and sending them to a university.

That is an excellent thing to do. It is a good thing for the son of the humblest workingman if he has the brain and the capacity and industry to be able to climb to the highest position in the land, but I am not going to sacrifice the millions of ordinary children in this country for the benefit of the few intelligent ones who want

to get into Parliament. I think you want to approach this education question from a much more practical standpoint. When I go into an elementary school the question I ask myself is this: "Is the kind of education which is being given in this school one that is best adapted for the majority of the children who attend here to equip them to live their life in a particular trade?" Do not mistake me. I do not want to make boys mere industrial machines. I want to fill their life and enable them to live their life fully, not only in their work, but in the other interests which pertain to their life. But I know as I look at these boys in that school that they are not all going to be paid £400 a year as members of Parliament. I know they are not all going to the university; I know that some of them are going to earn honest livings; and therefore I want to give them a real practical training, not to enable them to be talkers, for we have got quite enough talkers about, and we want more workers, that is the trouble. I want the standpoint of the local education authority to be: "How can we give the best possible equipment for the future of their lives to these boys and girls in this school?" I do not want mere university professors to settle the whole of this question for us. I want the common sense of ordinary practical men. I have a great admiration for men of genius. We can not do without these dreamers. We can not do without these thinkers. We can not do without these idealists, but they lead us into terrible messes unless a few practical common-sense people keep their eye on them when they are passing acts of Parliament. And therefore it is necessary that we should have a sound and rational and intelligent education policy. Then you come to secondary schools, and I really think that in these we are making a terrible mess of it. That is my first opinion. You have got to consider the material you are working with, and you have to consider the number of years that a child has at your disposal. It is no good trying to put a quart into a pint pot, for it can not be successfully done, and I say you want to grade your syllabus to the possibilities of the children you have to deal with. Then, I want to see a great deal more done with these trade schools, for I believe the future of trade schools is of vital importance to the commercial interests of the country. And then to revert for a moment to the elementary school. I do not think myself it is at all a good thing to take a bright, intelligent boy, who is going to be an artisan and can not stop at school longer than 15 or 16 years of age, from the elementary school and set him on a fresh kind of syllabus altogether.

I should like to have good elementary schools of the higher-grade type to carry the boy on to the termination of his educational career.[1]

Among the resolutions adopted at this meeting were the following:

That the time has arrived when the strongest possible protest should be offered by the local education authorities to undertake any further financial obligations until the Government has redeemed its long promise of further financial aid.

That in the opinion of this association the time has arrived when the regulations of the board of education governing higher elementary schools should be revised, and that the executive committee be instructed to submit a draft of suggested revision to the board of education for their consideration.

That the present system of inspection of schools followed by the board of education is unsatisfactory, as it fails to consider the various grades of education taken together and in their relation to one another in a given area.

Association of teachers in technical institutions.—One of the most important annual gatherings in England is that of the Association of Teachers in Technical Institutions, which held its annual conference at Bradford May 12–14 of the current year. Founded in

[1] Cited from the School Government Chronicle of June 7, 1913, pp. 499–500.

London in 1904, the membership of the association had reached 700 when the first conference was held two years later at Leeds. To-day it numbers 1,200 members. Great interest attaches to the present meeting, not only on account of the intrinsic importance of technical education, but of its relation to the plan for educational expansion which has been unfolded before Parliament. The president of the association, Mr. P. Coleman, of the Northern Polytechnic Institution, London, in his inaugural address dwelt particularly upon the need of "post elementary" education, freely open to the industrial classes of England.

The substance of this address was reported in the Yorkshire Observer, from which the following citations are taken:

In the last 10 years the percentage of those leaving the elementary school and proceeding to the secondary or technical school had nearly doubled, but it was still below 5 per cent. In London 35,000 boys left the elementary schools each year, of whom two-thirds drifted into unskilled occupations, with the probability of unemployment at the age of 18 or 19, and with no regular training during those years of employment. The trade schools for boys last session had 900 pupils, those for girls 700. In Munich and Berlin in the compulsory continuation schools for boys, the numbers studying with a view to skilled employment were 90 per cent and 65 per cent of the whole numbers. These schools involved an attendance for about 240 hours a year for the ages of 14 to 17. We could not as a nation afford this continuous waste of good material. The president of the board of education had already foreshadowed a large extension of the system of junior technical schools, an extension absolutely necessary if under modern conditions English industry is to continue to be carried on by skilled and intelligent labor.

With regard to the curriculum for junior technical schools, Mr. Coleman continued that it must be the first object of the school to impart the habit of study and reading. The school, he said, would not succeed if its students were content to stop at the point reached in a two-year course and had not opened their eyes to the great world of knowledge that lay all around and before them. While the foundation of the curriculum must be science and mathematics, with special reference to the future occupation, combined with these should be the study of English literature, history, and the principles of citizenship. Closing his address, the president said:

We must look forward to a time when it shall be, if not impossible, at any rate exceptional, to enter one of our great industries without some definite specialized training—a training to be continued in the daytime to the end of the apprenticeship or learning period. If this ideal be realized, our evening technical courses should, as a rule, be addressed to adult students who already possess a wide practical knowledge of their occupation and who are already accustomed to read and think for themselves. Students of this kind demand the best that the teacher can give, and when our colleges are filled with such learners and teachers fitted to teach them, the future of technical education and of skilled industry in this country will be bright.

The views presented by Mr. Coleman were strongly indorsed by subsequent speakers, including Mr. A. C. Coffin, director of education

for Great Britain; Mr. G. Fletcher, assistant secretary of the department of technical instruction in Ireland; and Prof. J. H. Reynolds, of the University of Manchester, president of the Association of Technical Instruction, who has spent the greater part of his active life in promoting the cause of technical training. Mr. Reynolds said "there can be no technology worth the name that is not built on science." The business of the technical teacher is to show—

the application of the deepest results of science to the needs of industry; without this, his nation can not remain at the head of the industrial nations of the world.

A SWEEPING CRITICISM.

The chief sensation of the year in educational circles in England was the indictment brought against the elementary schools by Dr. W. H. D. Rouse, headmaster of the Perse grammar school, Cambridge. Dr. Rouse, it will be remembered, was at Teachers' College, Columbia University, in the summer of 1912, and created great interest by his method of teaching Latin. He is a member of several learned societies and is one of the most eminent classical scholars of the day.

The indictment of the elementary school was published in the Evening News of May 15 and 16, 1913 (London), the first installment appearing under the title, "The Problem Stated." Its main points are summed up by that journal as follows:

Large classes of the people were well educated a hundred years ago without being able to read or write.

Life no longer educates the dwellers in cities.

Culture of the mind, control of the will, consideration for others' rights are not taught in the elementary schools.

Teachers drawn from these schools go all over the country and corrupt the local speech.

The elementary system seems hardly to touch the character. It is all artificial. Learning in itself is not respected.

There is no imagination in it, no enjoyment in the process.

The second installment of the indictment is headed, "A Remedy: School Colonies." The main points as summed up by the same journal are:

Dingy room and asphalt playground must be superseded by school buildings in the country.

Schools to be grouped in one large park for each district, with workshops and laboratories.

No distinction of social classes.

School colonies would develop sense of comradeship and spirit of give and take.

Cost might be covered by strikes avoided and decrease of pauperism and incompetency.

A STRONG DEFENSE.

The indictment by Dr. Rouse called forth equally strong defenses of the schools as they are. Among them, one from Sir James Yoxall, who knows the schools thoroughly, having begun his career as an elementary school-teacher. At present he is a member of Parliament, general secretary of the National Teachers' Association, and editor of the Schoolmaster, which is the tribune of the teachers in England. Mr. Yoxall drew attention to the fact that Dr. Rouse gives no proof of his actual knowledge of the conditions that he criticizes. In this respect his criticisms are like "accusations and fault findings which crop up now and again in newspapers and elsewhere from persons not qualified to judge of the difficulties." On the other hand, these views are opposed by officials, inspectors, parents, and scholars whose opinions are the result of experience and "a judicial habit of mind arising from opportunities for long and close observation of the subject."

With respect to the remedy proposed, Mr. Yoxall declared that Dr. Rouse belongs to the impossible class of critics and reformers who demand "a tabula rasa to begin with." Even were they within the bounds of possibility, it would require, he says, "a school life of 15 years, and of all of the day, seven days a week * * * to carry them out."

In proof of the steady development of the elementary schools and the effect they are producing upon the lives of their pupils, Mr. Yoxall said:

> Modifications and improvement are going on in the elementary school world—and in a very remarkable degree. Already it is fair to say (as the president of the board of education has recently stated), that the English elementary schools are second to none in the world, though they came into existence later than similar schools in any other first-class country.
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> If the elementary schools have hardly touched the character, how is it that the commonalty of to-day, who when boys and girls passed through the elementary schools, show such a marked improvement on what the commonalty used to be in most of the matters which arise from character? Not 5 per cent of the population have passed through secondary schools. Does Dr. Rouse suggest that of the adult population 85 per cent (for 10 per cent at least must be allowed for as never having been in an elementary or any school, or never having been there for any period worth mentioning) show—to the observing, calm, and respectful eye of a person old enough to judge of what used to be, and sympathetic enough to judge of what now is—that the behavior, manners, habits, and intelligence of the commonalty have not improved?

PATIENCE AND SYMPATHY.

> The fact is, of course, that only very slowly and through many difficulties does a race or a nation—and above all the poorer class of a nation—emancipate, elevate, and adequately fit itself for the best things.
>
> * * * * * * *

If he sympathetically knew the lives and work of elementary school-teachers, he would esteem and respect them, as people in general do; and if he were a philosopher at all he would know that mediocrity is the thing most likely to happen among great numbers of children or people, and that no educational system or variations in educational systems can make us all geniuses. If his aversion to mediocrity means (and I seem to get glimpses of that in his articles) that all except the very brilliant are to be kept in lower positions, and that the educational system should be adapted to that end, I refuse to consider a Calvinistic system under which a certain number would be elected to receive educational advantages and the rest doomed irremediably to the opposite.[1]

STATISTICAL SUMMARY.

The following tables summarize the principal statistics relative to the schools and higher institutions in receipt of Government grants:

TABLE 1.—*Statistics of elementary schools in receipt of grant from the board of education, 1911–12.* [2]

		England.	Wales.	Total.
1. Number of schools		19,399	1,868	21,267
2. Number of departments of schools		29,959	2,665	32,624
3. Number of head teachers	Men	12,672	1,409	14,081
	Women	17,228	1,250	20,478
4. Number of full-time assistant teachers:				
(*a*) Certificated teachers	Men	19,603	1,572	21,175
	Women	49,214	2,362	51,576
(*b*) Uncertificated teachers	Men	4,829	997	5,826
	Women	34,196	4,263	38,459
(*c*) Supplementary teachers	Men			
	Women	12,249	1,616	13,865
(*d*) Other teachers in special schools	Men	145	2	147
	Women	180	5	185
5. Number of part-time assistant teachers	Men	170	8	178
	Women	240	14	254
6. Number of student-teachers and pupil-teachers:				
(*a*) Student-teachers	Men	509	63	572
	Women	1,198	71	1,269
(*b*) Pupil-teachers	Men	916	198	1,114
	Women	3,472	560	4,032
7. Number of scholars on the registers		5,587,748	454,173	[3] 6,041,921
8. Average number of scholars in attendance during the school year		4,990,667	396,990	[3] 5,387,657
9. Average cost per scholar in average attendance of maintenance of public elementary schools by local education authorities		[4] 71s. 4d.	[4] 67s. 1d.	[4] 71s.
10. Average salaries:				
(*a*) Head teachers	Men	£177	£148	£175
	Women	£123	£112	£122
(*b*) Full-time assistant certificated teachers	Men	£129	£116	£128
	Women	£94	£88	£94
(*c*) Full-time assistant uncertificated teachers	Men	£67	£60	£65
	Women	£55	£52	£55
11. Total grants from the board of education		£10,742,774 ($52,209,882)	£886,393 ($4,307,870)	£11,629,168 ($56,517,752)
12. Total amount raised for elementary education from rates and borough funds		£11,427,809 ($55,539,152)	£789,088 ($3,834,967)	£12,216,897 ($59,374,119)

[1] Evening News (London), May 19, 1913.
[2] From a return to an order of the House of Commons, May 6, 1913.
[3] Includes pupils in special schools for defectives.
[4] Not including cost of special schools for defectives.

TABLE 2.—*Statistics of higher schools, England and Wales, in receipt of grant from board of education.*

Institutions.	Number of schools.	Number of teachers.			Students.	Total grant.	United States equivalent.
		Men.	Women.	Total.			
Secondary schools	995	6,895	6,513	13,408	165,617	£682,070	$3,314,885
Technical, art, and evening schools	8,972	29,702	12,809	42,511	843,738	587,200	2,853,792
Training colleges:							
For teachers of elementary schools	86	504	626	1,130	12,176	470,896	2,288,554
For teachers of secondary schools	13	.....	.....	.....	172	2,305	11,202
For teachers of domestic subjects	14	.....	.....	.....	1,033	4,386	21,316

TABLE 3.—*University colleges and universities in receipt of Government grants in England and Wales, 1911–12.*

Class of institutions.	Number.	Teachers.	Students.	Total grants.	United States equivalent.
University colleges	3	242	3,545	£23,313	$113,301
Universities	9	2,499	23,126	301,571	1,465,635
Constituent colleges of universities	23				

TABLE 4.—*Summary of expenditure, 1911–12.*

	England.	Wales.	Total.	United States equivalent.
Total grants included in above tables	£12,601,329	£1,078,742	£13,680,073	$66,485,155
Amount per unit population	7s. 6d.	8s. 11d.	7s. 7d.	1.84
Total amount raised for educational purposes from rates and borough funds	£13,267,964	£922,827	£14,190,791	68,967,244
Amount per unit population	7s. 11d.	7s. 7d.	7s. 9d.	1.88
Total amount received from local taxation account	£770,294	£36,966	£807,260	3,923,284
Amount per unit population	5s. 5d.	3s. 7d.	5s. 4d.	1.29
Total expenditure of the board of education on administration, inspection, and examination	.....	.....	£438,358	2,130,468
Percentage to total grants from the board of education included in above tables, per cent	.....	.....	3.3	.....
Total expenditure of local authorities on administration of education	£1,357,843	£94,908	£1,452,751	7,060,370

NOTES ON HIGHER EDUCATION.

The progress toward a national system of education in England has been marked by the foundation of provincial universities thoroughly imbued with the modern spirit, extending their provision without restriction to all classes of men and women, and drawing their support largely from municipal funds and treasury grants. Oxford and Cambridge have not remained outside this movement, and are being drawn within the supervisory province of the Government through the acceptance of public grants for specific purposes; for the current year Oxford received for the department of engineering science a

grant amounting to about $1,500, and additional sums for rural economy and forestry. Cambridge receives a grant for forestry amounting to $2,500 a year for three years, and from the Government's Development Fund an additional $15,000 for buildings required for research and teaching in the school of rural economy.

The trade-union and other associations of working men have lately demanded that the resources of Oxford and Cambridge should be turned more fully to the service of the mass of the people; but the proposition for a royal commission on the two universities has not been favorably received by the Government. Important reforms, however, are being accomplished in the universities by their own action. On the purely scholastic side special interest attaches to the abolition of religious tests, which formerly made the diplomas and the honors of these two foundations the exclusive privilege of members of the established church. The last vestige of such tests was swept away at Cambridge by the favorable action taken in February, 1913, upon the proposal to abolish religious tests in the case of candidates for divinity degrees. Similar action was initiated at Oxford by the theologic professors themselves. The statutes to this effect proposed: (1) To abolish the requirement that examiners in the school of theology must be priests in the Church of England; (2) that the degrees of B. D. and D. D. should be open to any master of arts who has "shown a good general acquaintance with Christian theology." The statutes were carried in congregation by large majorities, but were rejected in convocation. The report of the royal commission on the University of London, which was completed during the current year, is encyclopædic in scope and detail, and irrespective of its effect upon London, will long remain the source of information respecting modern university problems. It is interesting to note that the appointment committee, which was constituted at Oxford in 1892, has recently secured special recognition, and a similar board has been constituted at Cambridge. These boards are now placing over 300 men a year from each university.

The modern universities of England from their foundation gave great emphasis to applied science, and have had large development in respect to laboratory equipment and funds for research and instruction relating to the industries of their respective regions; for instance, the University of Manchester has specialized in study and research in textile subjects, and the University of Leeds in those pertaining to the leather industries.

Among the measures by which the older universities are meeting the demands for larger public service are the tutorial classes conducted under the combined auspices of the universities and the Workers' Educational Association. This work has proved so successful that the University of Oxford, at which the idea originated,

has just voted funds from the university chest for its maintenance. The enlarged plans for promoting relations between the older universities and those of the colonial Provinces are an outcome of the imperial spirit, which was signally manifested by the congress of British universities held at London in 1912.

Prominent among the subjects of discussion during the year is that of university provision for women. It is recalled that nearly half a century has elapsed since the Schools Inquiry Commission issued its report recommending among other reforms that of extending university facilities to women. These recommendations gave an immense impetus to the cause, which had already excited wide attention. The outcome is seen in the establishment of special colleges for women at Oxford and Cambridge and the opening of all the recent university foundations to women on the same terms with men. The latest illustration of the vigor of the separate colleges for women was the opening on July 4 of the new buildings of Bedford College of the University of London. This institution dates from 1849 and is the oldest university college for women in England. The inauguration of the new buildings was attended with impressive ceremonies, and was graced by the presence of Queen Mary and a large company of representative men and women.

SCOTLAND.

CURRENT EDUCATIONAL MOVEMENTS.

The year has been marked in Scotland by progress in respect to the new duties placed upon the local authorities by the education act of 1908. These duties include the means of prolonging the training of children who must early enter upon industrial pursuits, the assistance of such pupils in the choice of employment, and provision for continuing their training after they begin work. Along with this extension of educational efforts, important welfare duties have been placed upon the school boards by the act of 1908.

The purpose to bring every child under instruction is indicated by the arrangements for conveying children in isolated districts to the nearest school, and in cases where the distances are extreme and the roads very bad, for lodging children in the neighborhood of an accessible school. The expenditure by school boards for this purpose has increased as follows: In 1910 it amounted to £874 ($4,370); in 1911, to £1,324 ($6,620), and in 1912 to £2,202 ($11,010).

Provision for extending the period of elementary education is made by supplementary and continuation classes, which are treated quite fully in the present chapter. With regard to measures for assisting

parents and children in the choice of employment for the latter, the school boards as a rule report that progress is slow. The welfare activities are in the main comprised under the general head of medical inspection, which is also considered in extenso in this chapter.

SUPPLEMENTARY CLASSES.

PURPOSE.

The supplementary classes in the elementary schools, and the continuation classes with which they are linked up, have been created to meet the needs of pupils of more than average ability, but who from the pressure of circumstances or their own inclinations are not likely to go on to secondary schools. In this provision the Scotch authorities have endeavored to guard the unity of their school system and to prevent the evils of too early specialization; consequently their policy in this respect is attracting very wide attention. The superintendent of education for Nova Scotia in his current report declares that the provision of supplementary classes after the Scotch model is eminently desirable for his own Province. He explains the purpose and method of this provision as follows:

> One of the most practical changes that could be carried out in the present common-school program would be that which has been in successful operation in Scotland for a number of years. This modification of the classes in the Grades VII and VIII is designated as the "supplementary classes." The aim is to take the large proportion of boys and girls who will leave the public schools at the age of 14 and to thoroughly ground them in the rudiments of the common branches of knowledge that are necessary for every intelligent independent citizen. Besides this, the boys are given a lot of handwork in iron and wood in order to make them more proficient when they enter the apprenticeship period, and the girls are given a good deal of domestic economy so that they will learn the rudiments of efficient home making. The procedure in connection with these classes is exceedingly simple. At the age of 12 the pupils are classified. The parents are consulted as to the future of the boys and girls, and the great majority who are sure that they will not attend after the age of 14 are put in the above-mentioned classes. There is no attempt here at social stratification, no desire on the part of the educational authorities to keep the children of the poor in the occupations of poor parents, but merely a common-sense effort to make the children of more immediate practical value when they first start industrial life at the age of 14.

It is believed by the Scotch authorities that by the time pupils are 12 years of age it is possible to forecast their future course sufficiently to justify the transfer of a certain class of pupils into the supplementary classes, and another class into secondary schools, while the remaining pupils keep on to the end of the elementary school course. The endeavor is made to so correlate the work of the different grades of schools as not to preclude a subsequent change of course for those who have made the first break at 12 years of age.

SCOPE.

The official regulations comprise the following schedule of subjects common to all supplementary classes:[1]

A.— *The study of English.*

The main object of this study shall be to create a taste for good literature.

The chief means of carrying on this study should be:

(1) Systematic home reading, with properly directed choice of books.
(2) An efficient system of reviewing, explaining, and testing in school the reading done at home.
(3) The committing to memory, after discussion and explanation, of suitable pieces of verse and of prose.
(4) Systematic teaching and practice of English composition.

B.— *Certain studies bearing upon matters which it is of concern that all the pupils should know, whatever their occupations in after life are to be.*

Under this heading may be specified:

(1) The Laws of Health.
(2) Money Matters—Thrift, Investment, Insurance.
(3) The Conditions of Trade and Employment.
(4) The Institutions of Government under which we live.
(5) The Empire—its history, growth, and trade; our Colonies and the openings for enterprise which they afford.
(6) Nature Study, Drill, and Singing.

Reference is made to their lordships' circular letter No. 374 of February 16, 1903, for an explanation of the spirit in which they desire these studies to be pursued, and for certain suggestions as to method.

At this stage of study it is highly desirable that full use should be made of the ordnance survey map of the district in which the school is situated, both in connection with nature study and also for the purposes of specific lessons in geography.

As stated in the circular, it is not considered imperative that all the topics mentioned under Head B (with the exception of (1) The Laws of Health) should be taken up with the same set of pupils.

Specimen schedules are also offered for the specialized courses, which are as follows: Commercial, industrial, course for rural schools, household management (for girls), and navigation.

STATISTICS.

From the latest official report it appears that—

during the year ended August 31, 62,117 candidates were approved by the inspectors for enrollment in supplementary courses or in higher-grade departments, and during the same period the average attendance on which grant was claimed in 2,056 primary schools was 49,497, the latter number representing the scholars who have received instruction in supplementary course work, and on whose account grants have been allowed at advanced rates.[2]

The merit certificate was instituted in 1899 to encourage attendance at school up to 12 years of age. According to regulations adopted in 1903, candidates for this certificate must have pursued a supplementary course for at least one year. The total number of merit certificates awarded in 1912 was 18,489.

[1] Education Department, Scotland, Code of Regulations for Day Schools, 1913.
[2] Report of the committee of council on education in Scotland, 1912-13, p. 15.

CONTINUATION CLASSES.

ORGANIZATION.

The code of regulations for continuation classes provides for four divisions of classes, as follows:

I. Classes for the completion of general elementary education.
II. Classes for specialized instruction.
III. Courses for specialized instruction.
IV. Auxiliary classes.

The classes of the first division are open without restriction to any pupil who is free from the obligation to attend an elementary school. The managers of the classes are required to submit, for approval by the education department, a course of general instruction based upon the general course of the supplementary classes and other courses of a more specialized nature based upon corresponding courses in the supplementary classes. All the subjects of an approved course must as a rule be taken by all the pupils, the evident purpose being to discourage the pursuit of isolated subjects.

The regulations require that a class shall meet on at least two separate days in each week for a session of 20 weeks, excepting under special conditions. The teachers in continuation classes must be persons above 18 years of age, whose qualifications are approved by the department.

Division II comprises classes for the elementary instruction of pupils in such special subjects as may be of use to them in preparing for any particular trade, occupation, or profession; pupils must be over 16 years of age at the date of joining the class and give proof of fitness for the instruction. The different subjects provided for in this division are classified under the following heads: English subjects, which include English, geography, history, and the life and duties of the citizen; languages; commercial subjects; art; mathematics, extending through geometry, algebra, and dynamics; science; applied mathematics and science; handwork; physical exercises; and first aid (including ambulance work).

Division III comprises organized courses of systematic instruction arranged with a view to fitting students for the practice of particular crafts, industries, or occupations.

The division of auxiliary classes is largely intended to benefit teachers of special subjects required in the public schools. It includes classes of instruction in physical exercises, military drill, vocal music, wood-carving, fancy needlework, elocution in connection with an English course, etc. In respect to classes in all four of the divisions, it is required that only teachers be employed who give satisfactory proof of competency.

Grants are allowed in each division at fixed rates per pupil per hour a week, for a session of 20 weeks. The grants range as follows:

Division I: 3s. 4d. to 4s. 2d.
Division II: 4s. 2d. to 8s. 4d.
Division III:
(*a*) Commercial courses—
10s. in the second year,
15s. in the third year, and
25s. in the fourth and succeeding years.
(*b*) Industrial courses—
13s. 4d. in the second year,
20s. in the third year, and
35s. in the fourth and succeeding years.
Division IV: 2s. 6d. per capita.[1]

The classes in Groups II and III are directly preparatory to the central institutions, and every inducement is offered to promising pupils to complete their training in some one of these institutions.[2]

STATISTICS.

The statistics for 1911–12 pertaining to continuation classes show that 144,815 individual students were included for grant. A reference to the figures for 1901–2, the first year of the continuation class code, shows that the number of individual students then was 78,171; therefore, the number attending at the institution of the continuation class system in 1901 has now almost doubled itself. But although this points to much cause for satisfaction in the progress generally made, regret is expressed in the official report that there is a want of initiative among a number of the rural school boards. This timidity is attributed in some cases to the fear of expense falling upon the rates.

Attention is called to the increased grants offered for continuation classes in sparsely populated districts, and also to the fact that, when a rural school board is unable to assemble sufficient students to constitute a continuation class, provision is made by which pupils over 14 who have left the day school may attend at supplementary course work in the winter months, for probably two or three afternoons a week, and for these attendances special grants are awarded. It is contemplated that for these quasi-supplementary course pupils the work would be mainly practical and individual, with an amount of literary work sufficient to guide a student's home reading and study.

CONTINUATION CLASSES AT EDINBURGH.

The total number of continuation classes in Scotland reported for the session 1912–13 was 567; of this number only 13 were situated in

[1] Education Department, Code of Regulations for Continuation Classes, 1913.
[2] See table, p. 752.

the larger cities, which afford peculiar facilities for the conduct of such classes. In 1912 the organizer of these classes for Edinburgh visited the continuation trade schools of Germany, London, and Paris for the purpose of gaining suggestions for the improvement of the work under his charge. In his report of that tour, he says:

From the voluntary systems of London and Paris, Edinburgh has little to learn, so far as continuation class work proper is concerned. In the matters of enrollment, regularity of attendance, coordination with technical colleges, use of employment bureaus, and advisory committees, Edinburgh is distinctly in advance; but the equipment of the preapprenticeship and apprenticeship schools of London and Paris is more complete in many respects than what is provided in our trade classes.

When the comprehensive arrangements of the German towns are compared with ours, a somewhat different tale has to be told. For example, the system of Munich is superior in the following respects, viz: (1) All young persons between 14 and 17 are under instruction; (2) they attend school for a definite number of hours per week—nine hours for boys and six for girls; (3) they are taught at a time of the day when both pupils and teachers are comparatively fresh; (4) they receive a general as well as a vocational training; (5) the teachers, as a rule, are not engaged in primary school work, but they have been specially trained; (6) facilities for workshop practice are more abundant, and buildings are provided separate from the primary schools; (7) drawing is an essential subject in every course; (8) special courses are organized for journeymen, and for the temporarily unemployed; (9) instruction is given in the history of the various trades, and in the knowledge of trade materials; (10) all the teaching is made to bear directly upon citizenship as well as upon trade efficiency.

On the other hand, it may be claimed for Edinburgh that the workshop accommodation now being provided is quite as suitable for the purpose as the more elaborate buildings in Munich, is much cheaper, and more akin to real workshops in appearance; that the practical work in the trade classes, so far as it goes, is quite as good, and that more systematic efforts are made to guide boys and girls into suitable occupations. To our coordination with technical and art colleges there is no counterpart in Germany.[1]

SECONDARY EDUCATION.

GOVERNMENT MEASURES.

Secondary education in Scotland is the work of private and endowed schools or of municipal (burgh) schools, which are managed by boards distinct from those responsible for elementary education. By a series of measures extending over a period of nearly two decades the Scotch education department has been gradually bringing the secondary schools under Government supervision. In 1883 the department established a leaving certificate for students who, on the completion of a course of secondary study, should pass the certificate examination; subsequently an intermediate certificate was also offered. In 1885 the education department arranged for the inspector of secondary schools applying for the service.

[1] Edinburgh school board. Report by organizer of continuation classes.

PRESENT STATE.

The means and the importance of prolonging the school period for the great body of children have been prominent subjects of discussion in educational journals and meetings during the current year. In the debate in the House of Commons on the Scottish budget for 1913–14, the secretary for Scotland voiced the general sentiment of the people on this subject in his response to inquiries and criticisms that had arisen in the course of the debate. The secretary said in part:

My honorable friend the member for East Edinburgh (Mr. J. M. Hogge) expressed the desire that I might have made a general statement in regard to education at the beginning of the debate. He pointed out there has been a great change in the methods of Scottish education within the last 10 years. That is perfectly true. There has been a great change and a very important change. The old interest of Scotland in higher education has not diminished, but has increased, and the status of higher education in Scotland has been greatly raised. * * *

I should like to say that my position in regard to secondary education in Scotland is simply this: I recognize that it is necessary to maintain the system which has grown up during the last 10 years. There is no doubt that there was a strong need for improvement in the status of secondary education in Scotland 20 years ago. The university standard was too low, and therefore the standard in the secondary school was too low. Persons were taken into the universities at an earlier age, and they had frequently to attend elementary classes quite out of place in a university. I am not going over these well-known facts, but what I want to say is, it would be a great blunder if we were to go back on the advance that has been made in secondary education. Perhaps I can give some idea of it by a simple comparison. In 1899 there were about 30 secondary or higher schools in Scotland. There are now 250, and honorable members must remember that when we are talking about the difficulties of travel and of the children being away from home, how much greater was that difficulty 13 or 14 years ago, because you have these 250 schools spread all over Scotland. There is another point I want to make. I do not think any educationist will deny that it is better for individual pupils, if practicable, that they should receive this higher instruction in secondary schools, where the whole atmosphere is appropriate to such a school and where the teachers are of a certain standard, than that they should receive it in a primary school. At the same time, one knows there are difficulties—difficulties of distance and of money, and that it is very desirable you should give all the opportunities you can to higher instruction in the primary schools, but not to take the place of the secondary school where it is practicable to send the child to such a secondary school. The better secondary education is given in a proper secondary school; the other is a substitute. It is perfectly obvious where the child is getting education from a teacher in a primary school that it can not have the same effect as if it was received in a properly equipped higher secondary school.

It is quite a mistake to think we do not desire to see primary schools feeding those secondary schools. There are now in Scotland several hundred primary rural schools sending children to secondary schools equipped to enter upon the intermediate course in the second and even in some cases in the third year of that course. The scientific apparatus necessary and referred to by my honorable friend, the member for East Edinburgh, is not a very serious matter. A very few pounds will provide all the scientific apparatus which is necessary for the purpose of intermediate education. Of course the real difficulty is this, not that there are not enough scientifically equipped teachers or enough teachers with university degrees to supply all the schools, or enough turned

out of the universities to supply the vacancies, but the difficulty is that the small school boards can not afford to give the salaries or other inducements that will attract the equipped university graduate to that school. That is the real difficulty, but I want to make it perfectly clear that we are anxious to do all we can to encourage higher instruction in rural primary schools. * * *

Before I leave the question of secondary education I should like to mention a fact which I think is extremely interesting. I have said there are hundreds of schools which are giving higher instruction at the present moment, and that they were multiplied by more than eight times the number of primary schools in Scotland since 1899. I am glad to say in the matter of secondary education now the proportion of pupils who go from the elementary schools to the higher schools show figures of which we need not be ashamed. The proportion of children in Scotland going on to the real course of higher instruction is as 1 to 6.5, whereas in England it is 1 to 22; so I think that figure is a very satisfactory one, and when we are criticizing higher education in Scotland it is one to be borne in mind. There is one other point in connection with that subject. The difficulty of finding lodgings when children come from rural districts at considerable distances to the towns where the secondary school is situated. That is a real difficulty, and also where they have to come a considerable distance by train. I do not altogether sympathize, but to a large extent I do agree, with the honorable member for Glasgow University, in thinking that it is not quite worthy of the modern race of Scotsmen to make such fuss of a few miles on a bicycle when their grandfathers would have walked as many miles to obtain a much inferior education. But we are very anxious to meet all the real cases, and the experiment which is being tried to provide hostels for secondary students is one which I hope the school boards may take up and extend.[1]

MEDICAL INSPECTION OF SCHOOLS.

During the present year the first report on medical school inspection in Scotland was issued. It derives special importance from the fact that it was prepared by W. Leslie Mackenzie, M. D., the medical member of the local government board for Scotland, widely known for his works on the health of school children and kindred subjects pertaining to public hygiene.

The report presents an interesting survey of the measures that led to this service throughout the Kingdom. It is an unexpected result of a royal commission on physical training in Scotland, appointed in 1902 to inquire into the apparent physical deterioration of the common people; at the same time there was no reference to the health of children, as is indicated by the fact that the commission had only one medical member. In the progress of its investigations the commission discovered that data as to the physique of school children were almost entirely lacking in Britain. Accordingly, a medical investigation into a selected number of Scottish school children was ordered, the results of which are summed up by Dr. Mackenzie as follows:

> The facts elicited by the investigation were so striking that, for a time, they were regarded as gross exaggerations; but, both in England and in Scotland, they have been more than confirmed by later investigations now proceeding everywhere.

[1] Cited from the School Government Chronicle, Aug. 16, 1913, p. 136.

It is, however, worth recording that one of the investigators concluded his report as follows:

On the basis of these facts and inferences, I have formed the following general conclusions:

First. The large number of serious and minor diseases directly and indirectly affecting physical efficiency and mental efficiency constitutes an overwhelming case for a medical inspection of school children.

Second. The facts as to physical exercise at the various schools (four in Edinburgh, 150 children from each; two in poor quarters, one in a fairly good quarter, one in a good artisan or shopkeeper quarter) demonstrated that a primary condition of any good result from increased physical training is adequate food and adequate clothing.

Third. No systematic exercise ought to be practiced or enforced without a preliminary medical examination of the vital organs to insure that irreparable damage shall not result.

Fourth. That exercises should be organized—not as at present according to the code standard in which the child is situated but—strictly in accordance with health, physical development, and vigor.[1]

The commission recommended that—

School boards should have the command of medical advice and assistance in the supervision of schools; a systematic record of physical and health statistics should be kept; and a small number of medical and sanitary experts should be added to the inspecting staff under the education department.

It is worthy of note that England was the first to secure the law providing for the service recommended by this Scotch commission. Scotland had to wait until 1908 before legislation could be carried through to give effect to their recommendations. The education act for that year provided that—

A school board may, and where required by the department shall, provide for the medical examination and supervision of the pupils attending schools within their district to such an extent and subject to such requirements as may from time to time be prescribed by any code or minute of the department, and, for the purposes of this section, the school board may employ medical officers or nurses or arrange with voluntary agencies for the supply of nurses, and provide appliances or other requisites. (Education Act, sec. 4.)

The department of education and the local education authorities proceeded at once to carry this provision into effect. The first general report of the service, issued after the lapse of four years, is devoted chiefly to the history and organization of the movement, the sanitation of the schools, the personal hygiene of the children, and the general results in town and county. The author of the report says:

I have deliberately refrained, meanwhile, from any discussion of statistical materials which, though very important, are not yet by themselves sufficient to form the groundwork of general conclusions. In short, the aim has been to indicate not so much what is of scientific interest as what is capable of immediate remedy.

The education department, following the policies already adopted in England, advises that the county area be made the unit for the

[1] First report on the medical inspection of school children in Scotland, 1913, pp. 4-5.

work of medical inspection, exception being made in the case of a few burghs which, like Dunfermline, had previously made ample provision for the medical service. Detailed instructions for a county system are issued by the department, and the report before us includes the scheme of the Fife County committee, which has been approved by the department. The department also has issued a memorandum on the medical examination and supervision of school children, giving detailed instructions as to the conduct of this service, a copy of which memorandum is also included in the report. The clause of the education act cited above confers on the department of education a reserve of compulsion which may be brought into play where it appears that a local authority is neglectful of its duty in this respect. It is noted with great satisfaction in the report that it has not been necessary to exercise such compulsion except in one or two instances. The county education committees and the school boards have as a rule proceeded with the greatest good will to establish schemes of medical inspection through the length and breadth of Scotland. There are, it is true, one or two island authorities still to complete their schemes; but the delay is due purely to geographical difficulties. Within less than three years from the commencement of the act, complete systems of medical inspection have been established, with the assent and cooperation both of the health and of the school authorities concerned.

THE EDUCATIONAL INSTITUTE OF SCOTLAND.

The Educational Institute of Scotland is one of the oldest and most important associations of the kind in the world. For the first time in its history, since its foundation in 1847, a woman was selected by a very large majority, from four candidates, for sole nomination to the annual general meeting, as president of the educational institute for the year 1913–14. The honor fell to Miss Elizabeth Fish, LL. A., and she was formally installed in the office on the occasion of the annual meeting in September. This event gives occasion for some pertinent comments in the Educational News, which are here cited:

> Prior to the passing of the great education act of 1872 women teachers were practically unknown in Scottish schools. But a change began in 1873, a change which is still in process, the end of which no one can foresee. Few in number during the "seventies," and comparatively few in the "eighties," women have "come into their own" during the last 20 years to such a degree that in our schools they now outnumber the men by six to one. But in this development Scotland lags notoriously behind America, where, as regards both Canada and the United States, the schools are almost exclusively "manned" by women.
>
> As we are convinced that the school best fulfills its complex purposes which is most nearly a replica of the home, we believe that there is in the school, as in the home, room for both the paternal and the maternal elements, and it will not be a good day

for Scotland which finds men banished from the work of both primary and secondary education. Granting proper and reasonable inducements, such a break from the great traditions of the past need never be. Nor is there room for the suggestion that there is a necessary element of antagonism in the matter. As Miss Fish has wisely said, there is no profession other than teaching in which men and women work side by side so harmoniously and with a view to the common good as in the teaching profession. Long may this wholly satisfactory relationship continue. In the school and in the profession men's problems are women's problems; neither group can be solved separately; both may reach solution through, as hitherto, concurrent action. For example, the shameful salaries paid to so many women teachers in rural and in some provincial town schools will not be raised to a fairly reasonable amount without the help of men teachers and of that great organization which was founded by men and up to the present time has so largely been guided by men. At the same time very valuable work has in recent years been done by the women members of the council—a band relatively few in numbers, but strong in influence. This influence can not but be enhanced by the advent of a woman president. We predict for Miss Fish and for the institute a useful and successful year's work, and we are confident that not only the members of council, but every member of the institute will rally to support the first woman occupant of the presidential chair.[1]

STATISTICAL SUMMARY.

TABLE 6.—*Statistics of primary and higher grade schools.*[2]

Enrollment	844,715	Current expenditure	£2,854,181
Average attendance	757,993	United States equivalent	$13,871,320
Per cent of enrollment	89.73	Per capita of enrollment	£3.37
Teachers:			
Men	5,357		
Women	15,074		
Total	20,431		

TABLE 7.—*Distribution of pupils in the schools supported or subsidized by public funds.*

Classes of schools.	Enrollment in 1912.
Elementary:	
Primary	818,785
Higher grade	25,930
Total	844,715
Continuation classes	144,815
Secondary and intermediate:	
Boys	11,769
Girls	8,763
Total	20,532
Training colleges and training centers for teachers	1,561

[1] Educational News, June 20, 1913, p. 580.
[2] Report of the committee of the privy council on education in Scotland, pp. 103–120.

TABLE 8.—*Statistics of central institutions, session 1911–12.*

Names.	Number of students instructed.		Grants from the parliamentary vote, in terms of the minute of 16th June, 1910, under article 87 of the continuation-classes code.	Grants from the education (Scotland) fund, in terms of section 16 (1) (c) of the act of 1908.
	Day.	Evening.		
			£ s. d.	£ s. d.
1. Aberdeen, Robert Gordon's Technical College.	394	413	2,578 18 9	1,733 9 4
2. Dundee Technical College and School of Art...	169	1,078	2,999 12 9	2,528 15 1
3. Dunfermline College of Hygiene and Physical Training	37	.....	1,087 2 6	1,002 14 3
4. Edinburgh and East of Scotland College of Agriculture (central classes only)	238	261	3,571 7 6	2,647 8 1
5. Edinburgh College of Art	397	509	4,213 19 9	3,960 3 8
6. Edinburgh, Heriot-Watt College	229	2,937	6,567 1 11	1,167 10 0
7. Edinburgh Royal (Dick) Veterinary College..	75	.....	450 0 0	.....
8. Edinburgh School of Cookery and Domestic Economy	1,545	274	.....	.....
9. Glasgow and West of Scotland College of Domestic Science	720	30	.....	.....
10. Glasgow Athenæum Commercial College	88	891	1,297 11 10	990 16 9
11. Glasgow School of Art	370	335	4,102 7 8	3,799 6 11
12. Glasgow Veterinary College	35	.....	350 0 0	.....
13. Leith Nautical College	188	48	513 14 6	300 0 0
14. The North of Scotland College of Agriculture (central classes only)	138	.....	5,656 2 11	4,343 14 4
15. The Royal Technical College, Glasgow	552	4,563	11,461 0 9	8,179 8 4
16. The West of Scotland Agricultural College 300 students who attended at Kilmarnock (central classes only, and not including Dairy School)	143	106	4,798 6 2	4,011 1 0
Total	5,318	11,445	49,647 7 0	34,664 7 9
United States equivalent	.....	.....	$241,287	$168,470

EDUCATION IN IRELAND.

PROPOSED LEGISLATION.

Ireland has been in an educational ferment throughout the year, resulting directly from opposition on the part of the Roman Catholic bishops to the measures proposed by Mr. Birrell, chief secretary for Ireland, for improving the secondary and primary schools. These measures provided for increase of the national grants for both classes of schools named, having special reference to necessities recognized alike by Catholics and Protestants throughout Ireland. The bills were, however, weighted with conditions that were indignantly rejected by the Catholic authorities as an insidious attempt to break down the system of education in which they believe, and for which they have made great efforts and sacrifices.

In the face of the intense opposition excited by these measures the proposal for increased grants for the elementary schools was dropped; but a modified bill pertaining to the intermediate schools was passed at the close of the Parliamentary session. This bill, as explained by Mr. Birrell, chief secretary for Ireland, was unopposed and made no request for money. It simply provided that pupils between the ages of 8 and 14 in schools seeking relations with the intermediate

education board should be relieved from examination, inspection of their work, and of the adaptation of the school to children of that age being substituted therefor.

EDUCATIONAL ADMINISTRATION.

In order to understand the bearing of the legislative measures referred to and the summarized statistics given below, it is necessary to have in mind certain features of educational administration in Ireland. The State-aided elementary schools are under the commissioners of national education. This body comprises 20 members, of whom 10 must be Roman Catholics and 10 Protestants. The only salaried member is the resident commissioner, whose office is at Dublin. He is the executive head of the system.

Secondary education is fostered by the intermediate education board, which conducts examinations for pupils from these schools and distributes grants to the managers of the same based upon the results of the examination. The annual income of the intermediate education board is made up of the interest on a Government fund of £1,000,000, and a sum from the Irish share of the customs and excise duties, which averages about £50,000 annually. Technical instruction in Ireland is controlled by the department of agriculture and technical instruction, which has an advisory board of technical instruction. The income of the department consists of an annual appropriation of £166,000 and the interest on an original endowment of £205,000, together with such additional appropriations as may be allowed from time to time.

NATIONAL ELEMENTARY SCHOOLS.

The support of the elementary schools is derived from Government and local funds. The schools may be denominational, that is Roman Catholic or Protestant, or mixed in respect to religion. The rights of parents are strictly guarded by a conscience clause in the school regulations, which provides that no child be allowed to attend a religious exercise of a denomination other than his own except upon written request of the parent.

Grants are allowed by the commissioners in aid of the building of schoolhouses, but must not exceed two-thirds of the estimated cost of the proposed structure except in needy districts. The Government pays the larger proportion of the salaries of teachers, requiring, however, a minimum addition from local funds of £12 ($60) for each teacher. Altogether the Government bears 94 per cent of the annual expenditure for the elementary schools.

To avoid religious complications the department provides the textbooks for secular branches, which are issued at a small cost to the pupils.

For purposes of Government supervision the country is divided into 60 districts, which are grouped in 6 divisions, each in charge of a head inspector. Under these are 29 district inspectors, 7 unassigned inspectors, and 14 inspectors' assistants, and 1 inspector of drawing. Inspectors and their assistants are appointed upon examination testing their scholastic and professional qualifications.

Local civil authorities have no control over the schools. The local managers of schools, who are generally clergymen, come into direct relation with the board of commissioners. They appoint and dismiss teachers and arrange the details of the school work. Of a total of 3,061 managers in 1911, 2,497 were clerical.

Under the compulsory school law of 1892 school districts may appoint attendance committees. This action has been taken by 231 districts, of which number 228 have been very active in enforcing the law. In 1911 there were 39 towns and 113 rural districts without school-attendance committees. For the purpose of encouraging school attendance the commissioners have recently issued a military certificate which may be secured by any pupil over 13 years of age who has been enrolled in the seventh standard for one year, and who in the opinion of the inspector has attained fair proficiency in language, arithmetic, and geography.

The commissioners have direct control of a special class of schools called "model schools," for which they provide the buildings. These schools, as their name indicates, are intended to afford models of the best methods of instruction and organization, and to serve as practice schools for students in training colleges or normal schools. They numbered 30 in 1911, with an enrollment of 9,051 day pupils, included in the enrollment given in the table below.

PROGRESS.

Notwithstanding the widespread disaffection with present conditions, the year has afforded proofs of continued progress in the national schools. The average enrollment of pupils for the last year reported (ending Dec. 31, 1911) was 707,280, an increase of 9 per cent above that of the previous year; although this is not a large increase, it shows recovery from a decline of attendance that took place between 1909 and 1910. The average daily attendance maintained was 72.5 per cent, as against 70.8 per cent the year before, and the highest thus far recorded. The improvement in enrollment and attendance is attributed by the commissioners to the increased number of well-built and well-equipped schools, the greater qualifications and efficiency of teachers, and the increasing prosperity of the people. Through the consolidation of schools, the total number in operation declined from 8,720 in 1903 to 8,289 in 1911, but in the latter year there were 30,000 more pupils in attendance, notwithstanding the loss of over 400 small schools. Care is taken to preserve the rights of the teachers whose schools are discontinued by recognizing them on privileged conditions in the combined schools. The commissioners express regret at the proposal to cease the grants for building and improving schools, and they have addressed a press-

ing application to the treasury for the continuation of funds to be used at least in urgent cases. This is done under the conviction that the miserable and dilapidated condition of many of the schools has been the cause of unsatisfactory attendance as well as of indifference to the system.

TABLE 9.—*Summary of enrollment and average attendance in the national elementary schools of Ireland for the half decade 1907–1911.*

Year.	Number of schools in operation.	Average number of pupils on roll.	Average daily attendance.	Ratio of average daily attendance to average number on rolls.
				Per cent.
1907	8,538	732,460	485,979	66.3
1908	8,468	708,992	494,662	69.8
1909	8,401	704,528	501,107	71.1
1910	8,337	699,945	495,962	70.8
1911	8,289	707,280	512,862	72.5

In the above table are included convent and monastery schools, which under certain conditions receive aid from the Government. In 1911 they numbered 314, with a total enrollment of 114,197 pupils.

The schools of the Christian Brothers form a large part of the provision for elementary education, especially in the cities. Their system of education has taken deep hold upon the people, and they number among their former pupils influential men in every city and large town of Ireland.

TABLE 10.—*Number and classification of teachers.*

	1906	1911
Principals:		
Males	4,560	4,487
Females	3,592	3,364
Total	8,152	7,851
Assistants:		
Males	1,220	1,264
Females	3,226	3,918
Total	4,446	5,182
Total principals and assistants	12,598	13,033
Junior assistants	1,494	2,376
Manual instructresses		.....
Work mistresses and industrial teachers	247	170
Temporary assistants	73	.....
Gross total	14,412	15,579

EXPENDITURE ON SCHOOLS AND TEACHING STAFFS.

According to the report of the commissioners for the year ending December 31, 1911, the aggregate annual expenditure on the schools from all sources, including Parliamentary grant, school fees, and local subscriptions, amounted to £1,668,424 4s. 8d., as shown in the following table. This would give an average of £3 5s. 7d. for each child in average daily attendance during the year.

Sources from which expenditure was met:	£	s.	d.
(*a*) From State grants—			
Grant for primary education	1,480,517	8	6
Board of public works	48,328	10	9
(*b*) From local sources	139,578	5	5
Total from all sources	1,668,424 ($8,108,542)	4	8
Rate per pupil from (*a*) State grants	£3 1d. ($14.64)		
Rate per pupil from (*b*) local sources	5s. 6d. ($1.33)		
Rate per pupil from all sources	£3 5s. 7d. ($15.97)		

In addition to the expenditure for elementary schools by the commissioners of national education, the intermediate education board allowed grants to the amount of £50,198 ($243,962) on the examinations successfully passed by 7,015 pupils (4,767 boys, 2,248 girls), representing 343 intermediate or secondary schools.

IRISH TECHNICAL INSTRUCTION ASSOCIATION.[1]

The twelfth annual congress of the Irish Technical Instruction Association was held at Bangor, Down County, May 28–30 of the current year. The proceedings were animated by the consciousness of important achievements, and detailed accounts of the progress in technical instruction in different communities formed an important feature of the program. Down County itself may be taken to illustrate what is going on in every part of the island. With respect to this area the chairman of the county council said:

In 1905 we commenced a modest scheme of technical instruction with one domestic economy instructress and one manual instructor. I am pleased to tell you that we now have three domestic economy instructresses and two manual instructors, and in November last a technical school was opened in Downpatrick; pupils on the rolls number 240. The school has done well; the attendance has kept up, and everything with regard to it looks prosperous. For the ensuing session we will have a joint technical scheme working in County Down, consisting of all the rural districts, and also technical schools in connection with Donaghadee, Newcastle, and Warrenpoint. We began with an outlay on our modest scheme in 1904 of only £400; but it has worked up. The cost we anticipate for the current year will be £2,345. There are eight

[1] From Report of the Annual Congress of the Association, Bangor, Down Co., May 28–30, 1913.

suburban districts in County Down, and each of them will soon have a separate technical instruction scheme at its disposal. Since we commenced operations eight years ago 3,000 persons have taken advantage of the schemes which we were enabled to offer them, and have passed through different methods of obtaining technical instruction. Our estimate for the current year will be no less than about 7,000, which includes the agricultural and live-stock schemes. On the agricultural side we have allocated scholarships for the special education of the sons of farmers at a cost of £300 per year. If I remember aright, we have all the schemes of the department now in force, and, speaking of the department, we are not without gratitude in County Down. We recognize, and are happy to have an opportunity of doing so publicly, that but for the assistance of the department, technical instruction here, as in the greater part of Ireland, would probably be unknown. The department assists us with rather more than half our outlay, and that enables us to put the complete schemes of which I have spoken into force.

Eloquent tribute was paid to Sir Thomas Plunkett as the prime mover in that industrial transformation which has fixed the attention of all nations upon Ireland.

One of the most important subjects before the association was that of cooperation between county authorities and those of county boroughs and urban districts within the counties which have independent control of their own funds for technical instruction. Naturally, it is in the populous urban centers that well-equipped technical schools are established, and the rural districts within a county must either have access to these town schools or depend upon smaller schools and itinerant teachers for technical instruction. This matter was urged upon the attention of the congress by the vice chairman of the Cork County borough technical instruction committee, who introduced the subject as follows:

Since the passing of the technical acts of 1889–1891 and the agricultural and technical act of 1899 great developments have taken place. The most marked of all, I think, has been the erection of the splendid buildings in the six county boroughs, and also the new buildings in most of the larger towns, the result of which has been to enable these centers to provide much more thorough courses of instruction than could be got in small places, and the consequent desirability of extending their advantages as widely as possible. It must be remembered that developments are constantly in progress in the world of industry. Industries are every day becoming more complex and more specialized. If our technical schools are to fully meet the need of instruction, they must adapt their curricula and teaching in accordance with these developments. The cost of adequate staffing and equipment makes it impossible for small schools to do this work.

With respect to the relation of these schools to the surrounding country, the speaker continued:

It must be admitted on all hands that the town technical schools are the natural centers of instruction for the rural districts immediately surrounding them, and without these schools the county authorities would be compelled to either leave their young people uneducated or provide schools for them at great expense. It would, therefore, be reasonable and equitable that the county authorities should be willing to contribute a capitation fee, to, in a small way, pay their share toward the erection, equipment, and maintenance of the schools they use conjointly with the borough or

urban students, and also assist their students to attend by a small grant in aid of of traveling expenses, where such are incurred. I may add that such cooperation is a very common thing in England and Scotland, where county authorities contribute, as a matter of course, toward the education of pupils living in their areas, in technical schools situated in the larger areas of population, and it is not unknown in Ireland. It would seem reasonable that county authorities in Ireland should generally adopt a similar course for the boys of the rural districts surrounding a county borough or urban technical school. Such a course would remove one of the disabilities attaching to life in a rural district, and would tend in some measure to prevent the regrettable migration from the countryside to the town.

The bright boys in the country are at present handicapped in comparison with town boys in the absence of means of technical education, and in this connection I would urge the earnest consideration of county authorities to the advantages of the scholarship scheme already in existence and which is in operation in a number of counties. The more general adoption of this scheme would further tend to remove the disabilities referred to and enable the technical schools to extend their sphere of usefulness.

This paper brought out lively discussion, in which the position taken by the representative of Cork County was generally upheld, although the value of local classes and even the itinerant teachers for certain forms of industry was also insisted upon. The assistant secretary of the department of agriculture and technical instruction, while expressing the greatest admiration for the work that is done in rural areas by itinerant instructors in manual work and domestic economy, etc., recognizes fully the limitation of such a method of education. In this connection he said:

I ask you what are we going to do in the case of the bright boy in the country—magnificent material comes from the rural areas—what are we going to do for him? Are we going to make it impossible that he should compete in the same field with his brother in the large urban center? I think it would be a grave injustice. Where we find a boy of that kind, we ought to give him the chance of getting instruction in some center where technical education is efficiently carried on, and we have this in the large centers of population. Surely it is a question for the broad and generous consideration of county authorities. If they wish to do this for the brighter of their students, it can only be done in the large technical schools of the country. It has been urged, "Let these authorities do it; it costs them nothing!" But that is entirely inaccurate. It does cost them something; it must cost them something. It is not a very large sum, and it would be perfectly easy to arrive at an estimate of the amount it costs them per head. It seems to me that if any such assistance were given, it should be done on a basis such as this. A school can readily find out precisely what its education costs per head and what it costs per head out of the rates. Surely a contribution on a basis of the cost out of the rates on the students from rural areas is a perfectly fair basis. I happen to know it is the method adopted in parts of England and Scotland, and it is not altogether unknown in Ireland; and I am pleased to say that one of the first areas to carry this out was the rural district of Ballymoney. For the last six or seven years the rural district of Ballymoney has joined with the urban center and has struck a rate. I think it is just a matter for the sympathetic and broad consideration of county areas. I don't think one could ask county councils to do this unless it were in their own interests and for the interests of their work. I should like to see a movement in the direction indicated, supplemented by a generous system of scholarships. I should like to see opportunities given to the bright boy from the rural areas.

Technical instruction in relation to industries was the subject of a paper by Canon Arthur Ryan, of Tipperary, who emphasized the fact that what was needed in Ireland was not so much industries as industry. The great purpose of the association, in his judgment, was that of fostering in the rising generation of Irish men and women the spirit of industry, so that "with alert minds and skilled hands they may see and lay hold on the industrial opportunities that lie before them in the land of their birth." In regard to the evidences of a real increase of material prosperity in Ireland as a result largely of the technical instruction act, Canon Ryan gave the following information:

It is important to understand what the actual powers of the department are in regard to industry, and it appears that while they have large powers in regard to technical education and great freedom in regard to home industries, they have no power directly to finance an industry as such. They can educate and train our workers in the scientific and artistic principles underlying industries, but they can not subsidize the industry itself. They must not spoon-feed our industries—they may supply the food, but they must not use the spoon. It is of course quite otherwise in regard to agriculture, which, not being hampered so much by trade rivalries, is free to receive direct and often liberal subsidies from the funds of the department. In regard to industries the department freely use such restricted powers as they have, and one of their first and most successful efforts was to encourage by means of grants the numerous home industries classes in the country. All over Ireland classes in lace, crochet-making, drawn-thread work, embroidery, hemstitching, sprigging, knitting, and other industries have been assisted, and are still assisted, by grants given with a view of improving the character of the products of these industries, which yield a very important supplementary income to many families in rural areas. But home industries have a very difficult struggle as against the product of the machine, which has persistently invaded the domain of the cottage industry. In that struggle our sympathies may go, as mine certainly go, with the human being against the machine and the cottage against factory, with the modest competence of the many against the piled-up fortunes of the few; but it would have been criminal folly to ignore the part that machinery was destined to play in modern industries, and hence efforts were made to direct technical education in very close connection with industries already in existence in Ireland or industries which might be introduced with promise of success.

Among these it is encouraging to note the steady growth of the woolen industry, and the establishment of such mills as those at Galway and Kilkenny. Again, a most valuable illustration of the way in which technical instruction leads up to industries is to be found in the Kilkenny woodworkers' industry, which took its origin in the manual instruction classes held in the rural districts of the county of Kilkenny. A still more interesting example is the introduction of machine embroidery, an industry which has been carried on for so many years in Switzerland. For the last quarter of a century large quantities of Irish linen have been sent to Switzerland to be embroidered, and returned to Ireland. In this connection two schools have been recently established in Ballydougan, near Gilford, in county Down, and at Maghera in county Derry. These schools are aided by liberal grants made by the department in order to provide training for workers in this machine-embroidery industry, which must be regarded as a new one in this country, and it would seem that excellent progress has been made. The revival of the shipbuilding industry in Derry, which I had an opportunity of seeing at the last industrial congress there, gives promise that in this great and important field of enterprise the city on the Foyle may some day become a

rival of the city on the Lagan. The opening to-day at Balmoral of an exhibition of materials and manufactures relating to the dressed-meat trade is another event of the first industrial importance. There will be shown more than 30 distinct products of the scientific handling of offal. The tanning industry alone holds almost incalculable possibilities. And the mere fact that we import every year boots and shoes to the value of nearly two million sterling should set us thinking, seeing that we export yearly hides enough to make all these boots and shoes at home. Time would not permit of the mention of the large number of small industries which have been developed owing, in great part, to local technical training and the habits of industry resulting from it; industries which do not quench the spirits of the young or leave them wrecked in health, but which afford wholesome and artistic and fairly lucrative employment to thousands of Irish workers. We have the carpet-making factories at Killybegs and elsewhere, established by the congested districts board, and later the now flourishing carpet factories at Naas and Abbyleix; while there are the artistic, if smaller, ventures of the Dun Emer Guild, due to the tireless efforts of Miss Evelyn Gleeson; the stained-glass works of Miss Purser in Dublin, the metal-work industry at Fivemiletown, and a large number of others. Of one industry I can speak from close personal knowledge—that of glove making in the town of Tipperary and its neighborhood. Of course, this is still a young industry, and Tipperary is a town of less than 7,000 inhabitants; yet it is a great thing for us to have some 70 girls employed in healthy and cheerful surroundings, more than 40 of them doing the firm's work in their own homes, and earning wages which, if not high at first, are sufficient for their support, and are raised according as their proficiency increases. Some six boys are apprenticed to the master cutters, and although the skins used are not yet procurable in Ireland, the thread supplied by Messrs. Fownes is all of Irish manufacture. From the cutting out of the skins to the final finishing of the glove all is done in Tipperary, and last year over 70,000 pairs of these Tipperary gloves were turned out, or about £12,000 worth. I rejoice to add that the cottages in which much of this work is done are the cleaner and the tidier for it; the girls are deeply interested in their work, and not a single tall chimney has been added to blur the view of the Galtee Mountains. A few days ago some visitors to Tipperary saw not far from the town, and seated on a primrose bank, a merry group of girls, working away at their piles of gloves—industrialism al fresco! I may sum up this section of my paper by saying that the effect of all this constructive effort has been an increase in material prosperity, and statistics show a great increase in exports of agricultural produce and of manufactured articles. One of the consequences of these activities has been the establishment of the various industrial development associations, which have done so much good work in protecting Irish industries from fraud, and in directing the attention of the Irish people to the excellence of Irish products. In particular one may point to the establishment of the Irish trade-mark and to the very active campaign carried on by the Irish Industrial Development Association against the fraudulent sales of foreign products under the guise of Irish manufacture. We need not shut our eyes to the compliment implied in this dishonest imitation (what Irishman ever shut his eyes to a compliment?), but our vanity should not make us forget our purses.

Mr. Fletcher, the assistant secretary of the department of agriculture and technical instruction, dwelt upon the importance of education in the domestic arts. He urged two reforms in the present system of education.

First, training for home duties to form part of the education of every girl. Under this head should be included the laws of health, home nursing, and first aid to the injured. Mr. Fletcher noted that the department has already introduced systematic teaching of this

character into its training school, and has also for some years past held summer courses for the supplementary training of teachers at work.

Second, the cultivation of thrift. Under this head he included detailed study of income and expenditure, since the frequent failure to adjust the two to each other arises "not from the intention to overspend, but from the neglect to keep any sort of accounts, and this inefficiency characterizes many of the well to do, no less than the working classes."

The following problem was suggested for the course in thrift:

Given the household of an artisan living in an urban center in Ireland, consisting of father, mother, and two children (over the age of 10), and with a total income not exceeding 30 shillings per week.—To prepare for a year a detailed family budget showing the expenditure on rent, food, clothing, and other items of expenditure. The cost of articles of food, clothing, etc., must be stated in such a manner as to be capable of verification, and selection of daily menus should be given, with notes on the cost and preparation of the food.

I am of the opinion that an artisan budget would be of greater advantage than that of a family in a rural area—in the first place, at all events. In the country, part of the family income is generally "in kind." Substantial prizes should be offered for the best essays, which should be published. They should, of course, be submitted under a nom de plume, and adjudged by a small committee of experts. The experiment is worth a trial.

CHAPTER XXXIII.

CURRENT EDUCATIONAL MOVEMENTS IN SWEDEN.

By Dr. N. G. W. Lagerstedt.[1]

In order that American readers may obtain an accurate idea of the educational movements now going on in Sweden, it is desirable to consider briefly the origin of Swedish education and its characteristic features. The great problems of education of course are the same everywhere, but the order in which they are to be solved and the means of their solution may be quite different in a country such as the United States, where education has been built up from new foundations in comparatively recent time, and in countries of the Old World, where culture and education are of old origin and due consideration must be given to traditional forms of education.

In Sweden, as well as in some other European countries, there were schools for higher education in the earlier part of the Middle Ages, i. e., cathedral schools, convent schools, and city schools. After the introduction of the Lutheran Reformation most of these schools remained, and had reached a comparatively high development as early as the seventeenth century. The secondary schools for boys of the present time are an immediate continuation of these schools.

In the nineteenth century there arose in Sweden general interest in bringing the benefit of education to all members of society, and steps were taken to erect schools for the mass of the people in sufficient number. By the public elementary school statute of 1842 elementary education was made compulsory, and it was prescribed that each parish should have at least one public elementary school. Since then our elementary schools in the main have developed along the lines at first drawn up and may be said to have reached a high level with regard to the general extension of education. In Sweden practically all grown-up people nowadays are able to read and write. The statistics show that the per cent of illiteracy is only 0.1; Sweden, with the other Scandinavian countries and Germany, ranking foremost in this respect of all countries in the world.

Secondary schools for boys and elementary schools are both public schools in the sense that they are maintained at the expense of the State or of the communities. But there are also different kinds of private schools in Sweden, the most important of them being the girls' secondary schools, nearly all of which came into existence in

[1] Prepared at the request of the Commissioner of Education.

the latter half of the nineteenth century. The last-mentioned schools, however, as well as some other groups of private schools, may be considered as public in a certain degree, as they are subventioned by the State and communities and are subject to State regulations.

It results from the different origin of the chief classes of schools and their development independently of each other that, with regard to inner work and outward organization, they present incongruities. These probably might have been avoided without greater inconvenience and with saving of time, money, and human forces, and in all probability will be gradually removed.

It is only natural in Sweden, although it may seem strange to an American, that for children up to the age of 13 there are three different kinds of schools, all more or less public, intended partly for the different sexes and partly for children from different classes of society. If this be an inconvenience, on which the opinions of Swedish educators are divided, it must still be admitted that the inconvenience is not so great as might be supposed, and at all events it has some undeniable advantages. The fees of public secondary schools for boys have always been very small, and pupils in poor circumstances are exempted from paying more than a trifle of the charge, consequently these schools have practically been open to all classes of society. It is a fact that boys from the poorest classes have often been able to pass through these schools and rise afterwards to the highest positions in society. At present about 60 per cent of boys who enter the secondary schools have spent three years or more in the elementary schools, the first years of which may be considered, therefore, as the common basis of its own higher classes and of the secondary schools. It ought to be considered also that if children who are intended to receive a higher education enter at an early age a school preparing in a more direct way for such an education, they are enabled to save time and to begin their special studies sooner. Finally, the theoretical qualifications of male and female teachers of secondary schools are much better than those of elementary school-teachers, and this must be considered an advantage, also, with regard to the instruction in lower stages of education.

Nevertheless, the ideal of progressive educators in our country is coeducation, at least within certain limits—social coeducation and coeducation of the sexes—and the evolution at present is decidedly going in that direction, as will be clear from what is mentioned below.

In consequence of decisions that were made by the Rigsdag in 1904 a very important reform with regard to public secondary schools for boys was accomplished and carried through during the following years. The chief features of the organization of these schools since the reform are the following:

There are two kinds of public secondary schools for boys—modern schools (realskolor) of six years and higher-grade schools. A higher-grade school consists of a lower modern school and a higher "gymnasium" of four years. The gymnasium, however, is not a direct continuation of the modern school, but continues from its fifth class. It makes the normal complete course for pupils, who also pass through the gymnasium or higher-grade secondary school, the entire course extending over a period of nine years.

The higher-grade secondary schools as a rule are located in the larger towns. Most of the smaller towns have a modern school of six years. About half the number of these schools have been arranged on the plan of coeducation of boys and girls. By the school reform of 1904 the State for the first time established coeducational schools for secondary education.

The course of the modern school of six years is a continuation of a previous course of three years in the public elementary school.

Pupils who have gone through the modern school undergo a final examination (realskolexamen), which, if duly passed, entitles them to certain privileges, for instance that they be received as apprentices in some State service departments, as students in some special schools, etc.

The four-year gymnasiums comprise two different lines, the modern gymnasium (realgymnasium) and the Latin gymnasium. Most higher-grade secondary schools contain both lines, a few of them only the realgymnasium or the Latin gymnasium. By the reform measure the study of Latin was limited to the four years of the Latin gymnasium. Previously Latin was studied the last six years of the "Latin line."

The gymnasium is concluded by a final examination (student-examen), chiefly serving as an entrance examination to the university, but also entitling to certain other privileges, i. e., entrance to some higher special schools, etc.

The diagram given below is intended to make clear the relations of different Swedish schools and divisions of schools to each other.

During the last two years of the gymnasium the students are allowed a certain liberty in choosing their subjects of instruction. They may be entirely relieved from pursuing one or (under certain conditions) two subjects.

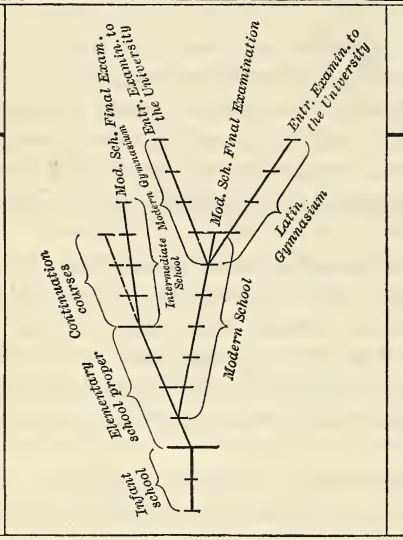
The public secondary schools for boys and all private secondary schools that receive State grants or have obtained some other State privilege are under the supervision of a State supervisory board (Kunglig Överstyrelsen för rikets allmänna läroverk) of five members, one of whom is the president (Överdirektör). One of the duties incumbent on the members of this board is to visit and inspect

schools in different parts of the country. The supervisory board was instituted in connection with the school reform of 1904.

The present organization of the secondary schools for boys, drawn up in 1904, may be said, upon the whole, to have worked very well. There is only one point on which more important changes have been proposed. As just mentioned, the students of the gymnasium within very narrow limits have a certain liberty in choosing their subjects. The question is now being discussed whether that liberty should not be essentially enlarged in such a way that each of the two present lines of the gymnasium should be divided into several regular lines preparing for different kinds of future callings or studies. A special

The Swedish Public School System.

Normal age of pupils. (years)		Years of the infant school.	Years of the elementary school proper.	Classes of the modern school.	Forms of the gymnasium.
17–18					4
16–17					3
15–16					2
14–15				6	1
13–14				5	
12–13				4	
11–12			4	3	
10–11			3	2	
9–10			2	1	
8–9			1		
7–8		2			
6–7		1			



committee, appointed for the purpose, has been working for some months under the guidance of the supervisory board in the investigation of that matter.

As mentioned before, the girls' secondary schools, though private (in a few cases the community is the private owner of its school), are subventioned by the State and the communities. Their present conditions are regulated by statutes of 1909. In accordance with these statutes the female teachers are guaranteed salaries to certain minimum amounts, and the State, as well as the respective communities and schools, have to contribute to their pension fund.

In the year just mentioned, 1909, it was decided to institute a new kind of public secondary school, namely, the *Intermediate School* (Mellanskolor). The cost of such a school is paid by the respective

community, with the help of a considerable State grant. The intermediate schools have for a basis the elementary school (infant school of two years and elementary school proper of four years). They comprise a course of four years and are intended to bring their pupils as far as to the Realskolexamen. In nearly all cases these schools are coeducational.

The immediate object in creating the schools in question no doubt was to care in a practical way for the needs of higher education in townlike communities, boroughs, greater villages, etc., that have arisen in great number of late in our country. There was no prospect that the State would establish secondary schools of the old type in them; but the new schools also imply the application to a greater extent than before of the principle of using the common elementary school as the basis of higher schools.[1] For such extension it will be an advantage to have obtained a solid basis of experience with regard to the results attained by such schools.

Objections have been made, especially by more conservative pedagogues, against the intermediate schools, some of which undoubtedly may be considered to have a certain weight. It is said that four years is a rather short time for preparing pupils to fulfill the requirements of the Realskolexamen. This refers especially to the requirements in the two foreign languages, German and English. There is a certain risk that under such circumstances the pupils may be overstrained. With regard to this, however, it may be recalled that the normal age of the pupils in the intermediate schools is somewhat higher than that of the pupils in the Realskolor; the complete course of the former comprising ten years (six years elementary school, four years higher school) and the complete course of the latter only nine years (respectively, three years and six years).

Another objection is that the requirements of competency being somewhat less with regard to teachers of intermediate schools, the general standard of culture (bildningsnivån) of the nation would be lowered if the first-mentioned school should become the normal type of school instead of the latter. In order to form a judgment with regard to this matter, the following facts concerning the training of teachers in Sweden should be understood.

The teachers that are appointed in elementary schools must have graduated at an ordinary training college. To enter such a college the candidate must show by examination that he or she has acquired at least a tolerably complete elementary school education. The course of such a college extends over four years.

For the public secondary schools for boys, there are three principal kinds of teachers, namely, professors (lektorer) (in the higher grade

[1] No doubt, sooner or later the question will arise of transforming the Realskolor, at least the coeducational ones, into the type represented by the intermediate schools.

schools only), who are required to teach chiefly in the upper classes; assistant professors (adjunkter), who are required to teach only in the lower classes; and female teachers, three in every State coeducational school. "Lektorer" and "Adjunkter" must have gained university degrees according to special regulations, the requirements being higher for Lektorer. Moreover, every teacher of this class must have passed a probationary year at one of the secondary schools, where courses for that purpose are arranged, the work of the year embracing the theory of education and practical exercises in teaching. The female teachers are required to have the same qualifications as adjuncts or to have satisfactorily passed the regular course of a duly approved higher training college for women teachers. Most of the teachers in girls' secondary schools have passed a training college of this kind.

The teachers in intermediate schools, whether men or women, are required to have the same qualifications respectively as adjuncts as female teachers in the ordinary State secondary schools. There is also a possibility that elementary school-teachers or other teachers who are able to produce satisfactory testimonials with regard to special studies in subjects taught in the intermediate schools and in regard to their own work as teachers shall obtain certificates of competency for appointment in intermediate schools. This privilege depends upon a special decision of the Government, based upon the consideration of each individual case.

From the arrangement just mentioned it might result, if the authorities are lax in according the competency in question, that teachers of intermediate schools in general should have a lower degree of efficiency than teachers of other State secondary schools. In the case of women teachers, however, the difference will be little or none, because since the salaries of such teachers in both classes of schools are nearly the same, candidates of high competency are as likely to apply for situations in the one class of schools as in the other. In any case, there is no doubt that among teachers who have not obtained the certificate of competency there may be very clever ones whom it would be a decided gain to secure for any school for children.

It ought also to be remembered that, if the intermediate schools had not been established, in most cases there would have been private secondary schools in their place, and the competency of the teachers for these schools would have been inferior by far to that of the intermediate school-teachers.

In the year 1906 a royal committee was appointed to investigate the organization of training colleges for elementary school-teachers and to make recommendations embodying the results of this investigation. The chairman of the committee was Mr. Fridtjuv Berg, who had been minister of education for some months before, but

left this office when a conservative ministry succeeded the liberal ministry to which he belonged. The scope of the committee was eventually enlarged to comprise also some other questions pertaining to popular education, and the number of members was increased.

In December, 1911, the committee published their first very voluminous report, treating of the training colleges. Later the committee issued two other reports, one treating the question of a supervisory board for all kinds of schools, and the other the reorganization of the work of school inspectors. On these reports were based three important Government bills laid before the Rigsdag of 1913, each referring to one of the questions just mentioned.

It should be remarked here that in Sweden legislation pertains to the Government and the Rigsdag in common, but that reglementary ordinances, etc., are issued, according to the constitution, by the Government alone (as a branch of the King's "economic legislation"). It has become, however, more and more the practice for the Government to invite the Rigsdag to decide conjointly with it even in these minor questions, and now no alteration of any great importance is carried through without the consent of the Rigsdag.

Of the bills referred to, that relating to training colleges met with the approval of the Rigsdag in everything essential. On the question of a common supervisory board opinions proved to be much divided. The Government had proposed that a supervisory board for elementary schools and other institutions pertaining to popular education should be established and that this board and the previously existing supervisory board for the secondary schools should form two different divisions of one common body, at the head of which there should be one chief. The conservatives were rather indifferent to the new board for the elementary schools, but they were very fearful that a common board might further the development of secondary schools along lines that they did not approve. The result was a compromise; the Rigsdag decided that a separate board should be established for popular education and that the board for secondary schools should function as it had done before. It seems very likely, however, that the many points of contact between the two boards will bring them into close connection with each other and that it is only a question of time when a common board such as was proposed by the Government will be instituted.

Of details belonging to the organization of popular education under the guidance of the new board, one deserves special mention. The two existing school authorities, the local school boards and the "chapters," are to be maintained, both of course subordinate to the new supervisory board. Sweden, it should be stated, has a State church, and in every diocese there is a chapter under the presidency

of the bishop. The chapters at present have the superintendence of popular education in the respective dioceses, and they will continue to hold an intermediate stage between the local school boards and the new central board.

As for the Government bill on school inspection, the final decision of the Rigsdag was put off until the session of next year. One of the reasons for such action was the wish of the Rigsdag that the new supervisory board might have the opportunity of giving their opinion on the question, and thus contribute to the best possible solution of it. The reforms proposed with regard to school inspection have for their object chiefly that the inspectors, who hitherto as a rule have acted in that capacity in addition to some other work that has been their occupation, should hereafter have the duties of school inspector for their chief work.

The decision of the Rigsdag with regard to training colleges involves the approval of the general principles laid down by the Government, and the appropriation of requisite means for carrying them into effect. The special statutes regulating the matter in detail will be published later by the Government.

With regard to the proposed reforms the following statements may be of general interest. At present the training-college course extends over four years, and the candidate for entering must show by examination that he or she has acquired at least a tolerably complete elementary-school education. The general aim of the regulations now in force is to insure that the training colleges shall impart chiefly the same kind of knowledge to their students as the latter should impart hereafter to their own pupils, and that essentially the same methods of instruction should be used as in the elementary schools. Under the new regulations the content of the instruction in the training colleges will be more adapted to the age of the students, and methods are to be used based upon their own study and observations. The students in the training colleges accordingly will gain a more decided habit of self-activity. There is no doubt that instruction of this kind will have the tendency to excite the interest of the students in continuing their own studies afterwards and will prepare them better for such efforts.

The question has been discussed whether the course of the training colleges should not be extended to comprise five years. It has been decided, however, to maintain the present length of the course, but in order that the students may be better prepared for the new methods of study the requirements of admission have been essentially increased.

To the subjects now included in the training-college course two new ones will be added, namely, a foreign language and "economy." As for the foreign language, it will be English or German, but only

one of the two languages for each individual college. The subject "economy" is intended to comprise the historical development of the economic life as well as its most important phenomena at the present time, and especially the industrial life of our own country.

In addition to the reforms in the training colleges now decided upon, considerably larger yearly appropriations have been voted by the Rigsdag to increase their libraries, apparatus, and materials of instruction.

In order that the best possible professors of the colleges may be obtained, it is of great importance that they should have the inducement of good salaries. It is intended that the present scale of salaries shall be raised in a short time. For certain reasons this could not be done at the Rigsdag's session this year.

What has been said may have made it clear that very important changes have taken place with regard to Swedish education during the past decade, changes which in my opinion mean decided progress in a good direction. It is, then, only just to mention the names of those persons who in the first place have been active in bringing about the reforms. The reforms of 1904, the reorganization of secondary schools for boys, are due chiefly to Ernst Carlson and Carl von Frieson, both now deceased. The former, a secondary-school professor, as a member of the Rigsdag took up the question there, and this led to the decisions in consequence of which a royal committee on the matter was appointed. Carlson and Von Frieson both became members of that committee. Later on Von Frieson was appointed minister of ecclesiastical affairs and education, and in that capacity he prepared the royal bill on the subject which was presented to the Rigsdag of 1904. Carlson became the first president of the new supervisory board for the secondary schools.

The regulation of the relations between State subventioned private schools and the State, as they were settled in 1909, as well as the erection of intermediate schools, is the work chiefly of P. E. Lindström, minister of education at that time, and Fridtjuv Berg, member of the Rigsdag and very active in the select committee of the Rigsdag, who had to prepare the matter. Mr. Berg, whose name has already been mentioned in this paper, is the present minister of education, and in that capacity prepared the Government bills which led to the important decisions adopted by the Rigsdag in 1913. He may be considered the most prominent of living Swedish educators, not only on account of the high position he occupies, but also on account of what he has accomplished as a writer on educational subjects, editor of a widely circulated pedagogical newspaper, and an influential member of the Rigsdag. His career is a rather uncommon one in our country. His original and essential calling was that of an elementary-school teacher, and no doubt he still considers himself as a

teacher above everything else. Though he has passed no university examinations, he has acquired by private study a high degree of intellectual culture, and in recognition of that attainment the University of Upsala has conferred upon him the honorary degree of doctor of philosophy. It is his enthusiastic interest for the cause of education, especially the education of the people, his ability as a politician, as well as his intellectual and moral qualities on the whole, that have made it possible for him to rise to the post he now occupies. He is the first elementary-school teacher in our country who has become minister of the Crown.

CHAPTER XXXIV.

EDUCATION IN THE SMALLER KINGDOMS OF NORTHERN EUROPE.

CONTENTS.—Introduction—Denmark: Jubilee celebration; child labor—Norway: Child welfare; improvement of teachers; the domestic science training school—Sweden: Church music conference; teachers' associations; the summer school at Naas; grants to teachers; legislative action—The Netherlands: Current events; the universities; representatives in the United States; University of Commerce at Rotterdam—Belgium: Legislative measures; school attendance; action of the teachers' federation; technical and industrial education; welfare activities; statistical survey.

INTRODUCTION.

The smaller kingdoms of Europe bordering on the North Sea include, besides Sweden, two Scandinavian countries—Norway and Denmark—the Kingdom of the Netherlands, and Belgium.

The educational systems of the Scandinavian countries preserve the evidences of their common origin in their school administration, their ample provision for the elementary education of all the people, compulsory school attendance laws, and the ready access to higher institutions for all who reach the entrance standards. The main features of the Swedish system, described in Chapter XXXIII, pertain also to the systems of Denmark and Norway.

In the adaptation of school training to the actual needs of the people and in provision for vocational training, the Scandinavian countries are in advance of English-speaking nations, and they have originated several expedients of great value in the general conduct of popular education. Among these may be mentioned the Ling system of gymnastics and the sloyd system of manual training, both of which originated in Sweden, and which, in either principle or methods, have been adopted in many other countries. The people's high school, the institution by means of which Denmark has provided for the continued ethical and civic training of its adult population, either in its Danish form or in the modified form of county high schools for adults developed in Norway, has been copied in parts of the United States.

Radical changes in the school systems are not to be expected under the conditions that exist in the countries here considered. Every year's record, however, affords proof of the purpose to keep the methods and provision of popular education close to the vital needs

of the people. Complaints are made from time to time of antiquated forms of administration and too close regard for traditional methods of instruction; the teachers' associations of the three Scandinavian countries are extremely active and agitate for greater freedom and better remuneration for the members of the profession. To a certain extent also there is opposition to the excess of clerical influences in the management of the schools.

CURRENT EVENTS.

The following notes pertaining to celebrations, investigations, and associations' meetings, or to isolated efforts for the improvement of schools, are taken from current educational journals [1] of the countries referred to, from official correspondence, and consular reports.

DENMARK.

Centennial celebration.—Denmark is making preparation for a jubilee celebration to take place in 1914, commemorative of the great event 100 years ago, which not only affected the political destiny of Denmark, but also its public school system, the educational code of Frederick VI promulgated in 1814 being the foundation of the present school system of Denmark. In order to prepare for this celebration the teachers' association of Denmark has been holding meetings in Copenhagen, and has announced several important commemorative publications. Among these is a collection of descriptive and biographical sketches of a great number of well-known teachers and their work as authors, statesmen, etc., prepared with the assistance of Dr. Benthin, the distinguished archivist.

Child labor.—From an investigation recently made in Denmark for the purpose of ascertaining to what extent school children are obliged to work for their living, it appears that of 370,000 children, 45,000 performed such work in their homes and 65,000 for strangers. In the country it was found that 5 per cent of the children of great farmers, 26 per cent of the children of small farmers, and 41 per cent of country laborers' children worked for strangers.

Some children began such work at 6 years of age, and nearly 14,000 were only 10 years or less. One-half of the children had a working day of 10 hours or more. The day's work began in certain cases at 4 a. m., and for 2,500 children it began at 5 to 5.30 a. m. and seldom ended before 10 p. m. The day's wage for 4,000 children was 10 cents each, together with food, and many received only 10 cents without food.

[1] The journals consulted are: Svensk Läraretidning; Norsk Skoletidende; Folkskolans Vän.

NORWAY.

Child welfare.—Several places in Norway are taking measures to promote the physical welfare of school children. The American consul at Stavanger reports that the city council has instituted a department for the examination and treatment of the school children. Two dental rooms have been fitted up, and, at the opening of the schools, August 17, 1912, were ready for use by the children. The council appropriated the sum of 3,000 crowns ($804) for dental instruments and apparatus to start with, and the sum of 5,700 crowns ($1,527.60) for maintenance for the first session of the school.

The consul notes that much of the dental equipment has been secured from America, and the dental surgeon selected to take charge of the work received his postgraduate dental course in the United States.[1]

The city of Bergen maintained an open-air school at Mjolfjell, to which 30 delicate school children from the city were sent for a month's recreation and instruction. They returned from their stay in the mountains strong, active, and greatly improved in health. The community appropriated 1,000 crowns ($268) for this experiment.

Improvement of teachers.—In all the school programs prominent place is given to singing, but the teaching is far from satisfactory. A music committee appointed to investigate the subject expresses the opinion that the first requisite is better training for the teachers in this particular art, and advises that more time be given to the subject in the normal schools and under the direction of competent professors. It is recommended by this committee that in order to secure a position as teacher of music and singing in the training colleges the candidate should pass the organist examination prepared by the church department and should have completed a course at a conservatory of music. It was advised that $28 a week should be allowed for this branch in the training school.

A language course is offered in the school for teachers at Elverum. The course begins July 3, and is maintained 7 weeks. Instruction is given in reading, translation, grammar, conversation, and composition in two languages—English and German. Nineteen teachers received traveling scholarships for the school year 1913–14. The sum appropriated for this purpose was 10,000 crowns ($2,680).

The Norwegian Teachers' Domestic Science Training School received an appropriation from the Storthing of 56,400 crowns ($15,115.20); 10,180 crowns ($1,728.24) to be used as a revenue; 46,220 crowns ($12,386.96) for expenses. The salary for the superintendent was fixed at 1,800 crowns ($482.40); 1,200 crowns ($321.60) for the head instructor and for the teacher in cookery; and 900 crowns ($242.10) for an assistant instructor.

[1] Communicated by P. Emerson Taylor, United States consul at Stavanger.

SWEDEN.

Church music conference.—The King of Sweden appropriated 500 crowns ($134) to cover the expenses of a general church music conference to be held in Linkoping in 1913.

Teachers' associations.—The importance of promoting more intimate relations between school and home was discussed at the May meeting of the Karlskoga teachers' association, one of the constituent societies of the general teachers' association of Sweden. It was advised that meetings of parents and teachers should be held to promote better understanding of their common interests.

At the same meeting the subject of textbooks in the primary schools was considered and a special committee was appointed to investigate this matter and report the results of their inquiries at the fall meeting.

The annual meeting of domestic-science teachers was held in Gottenborg on August 16. From the report of a special committee presented at the meeting, it appears that continuation courses have been provided at different centers in washing and ironing, in baking, and in the preparation of food. Petitions were sent to the King concerning the regulation of the salaries of domestic-science teachers in the common schools and the changes in the requirements for receiving State aid for promoting instruction in the subject.

The manual training school at Naas.—The commencement exercises for the first summer courses at Naas were held on July 16. The total number of students was 230, of whom there were 101 students in sloyd, 75 in drawing and modeling, 29 in physical culture, 21 in domestic science, and 4 in gardening. Of these there were 5 students from Norway, 4 from Finland, 1 from England, 6 from Austria, 1 from Brazil, and 3 from South Africa; all the remaining students were Swedes.

The late summer courses in sloyd, physical culture, and gardening began on July 23. There were 226 students, and of these one was from Australia. Besides Sweden, 15 nations are represented.

The general association of teachers.—The fifteenth annual meeting of the association of common-school teachers in Sweden was held July 1–3 at Lund. Between 1,500 and 1,600 delegates attended the meeting, which was one of the largest school conferences that have taken place in Sweden. The discussion related to important phases of school work, viz, vocational training, child welfare, instruction in sloyd, language study, etc.

Particular interest was aroused by an address on continuation schools. The speaker, Per Borgh, described the present state of the continuation school in comparison with the common school, and then explained its aim and purpose. He said in part:

> If the work in the common school is to bear fruit in the integrity, efficiency, and patriotism of the Swedish people, then the young people during the so-called transi-

tion period must not be left without any influence from the school, but must continue to have the benefit of training and education.

As the continuation school is higher than the common school and not a substitute for it, its courses should be prepared for students who have finished the common school or have received an equivalent education, and they should be arranged according to local conditions, so as to train the student for the practical affairs of life. The course of the continuation school should cover at least two years. Since this instruction, as a rule, will be given by the common-school teachers, they should have an opportunity to study special continuation courses at the expense of a general fund.

Centennial celebration of Swedish gymnastics.—The one hundredth anniversary of the famous Ling system of Swedish gymnastics was celebrated May 5 of the present year. One hundred years ago the King of Sweden granted the inventor of the system, Per Henrik Ling, permission to teach gymnastics in Stockholm, and soon afterwards he founded and became the director of the Gymnastic Central Institute. Throughout the whole country the schools observed the anniversary, the chief celebration being the students' exhibition, which was held in the stadium at Stockholm. The participants were 1,500 young athletes, under the leadership of Capt. B. E. Littorin. The rapidity with which they obeyed the commands of their leader and the precision of their movements excited the greatest admiration.

The universities and smaller schools celebrated the occasion with speeches and music. Several groups of young people decorated the grave of Ling as an expression of gratitude for what he had done for the physical health and strength of the people.

Grants to teachers.—For the year 1913 the King of Sweden granted the sum of 1,300 crowns ($571.80) for the study of domestic science in foreign countries. This sum will be distributed among three teachers, who will spend from four to six weeks in Denmark, Holland, and Germany. Each teacher must make a full report of her work within four months after her return to Sweden.

A scholarship of 500 crowns ($134) was granted to Mr. G. Bergh for the purpose of spending about four weeks in studying the school system and the instruction in the public schools of the United States. Mr. Bergh was the secretary of the committee to represent Sweden at the International Congress of School Hygiene in Buffalo.

Legislative acts.—By an act of May 23, 1913, the Swedish Parliament increased the total appropriation for the salaries of teachers in the common schools from 11,200,000 crowns ($3,001,600) to 11,700,000 crowns ($3,135,600); a few days later the Parliament unanimously decided to make an important change in the curriculum of the common schools. Among other subjects, instruction will be given in political economy and one foreign language, either German or English.

THE NETHERLANDS.

CURRENT EVENTS.

The present year closes a century of independence for the Kingdom of the Netherlands, and the event has been celebrated by many ceremonies and expositions. The latter included a navigation exposition at Amsterdam and an exposition significantly termed "The Woman," which was intended to illustrate the development in woman's status and work in the period 1813 to 1913. The idea was well sustained, and the novel exposition formed a center of interest during the international meeting of women held at The Hague in May.

The Kingdom holds high rank among European nations for the general diffusion of education and the low degree of illiteracy, although in the latter respect it is surpassed by the neighboring Scandinavian countries. Statistics for 1900 showed for the Netherlands 1.4 per cent of illiterates among the army recruits, against less than one-half of 1 per cent in Sweden and Denmark. The contrast in this respect was one of the causes of the support secured for the compulsory provision included in the education law of 1900. The law also gave some advantage to public secular schools, as compared with denominational schools; but this advantage was incidental to the main purpose of the provisions with regard to the teachers' salaries, an advantage that could not be extended to private schools without radical changes in existing laws. Private schools, however, were placed upon the same basis as public schools with respect to State subventions. The effect of the law, on the whole, has been to increase the number of denominational schools. According to statistics of 1911, on a total of 916,594 pupils, 353,547, or a little more than 38 per cent, were enrolled in schools under the control of the various religious bodies.

The Liberal Party in the Netherlands, as in other countries, are striving for the establishment of a free system of secular education under public control, and since their power has been greatly increased by recent elections, it is believed that an amendment to the school law looking to that final result will be submitted to the States-General.

Ample provision is made in the Kingdom, both by public and private agencies, for industrial and technical training. The industrial or technical schools of the lower order have always been regarded as complementary to the elementary schools, but the law of 1900 made the completion of the elementary grades an obligatory prerequisite for admission to the lower technical schools. This action reenforces the compulsory provision of the law, as parents are eager to secure the practical training for their children.

The latest development in industrial education is the plan for bringing to rural communities systematic instruction for women in household duties and the lighter forms of farm work which fall to their lot. Such instruction has hitherto been given in various institutions throughout the country, but the present purpose is to relate it directly to rural life. For this purpose, plans for itinerary classes have been adopted, following the example of Ireland and Germany. The courses of instruction which have been already provided for include nature study, zoology, botany, and practical training in household industries, including the selection and preparation of food, the purchase of material, and keeping accounts.

THE UNIVERSITIES.

The scientific prestige of the Dutch universities was brought vividly to the minds of Americans by the participation of Dr. Hugo de Vries in the international congresses held at St. Louis in 1904 in connection with the Louisiana purchase exposition. This memory is revived at the present time by the arrival in this country of Dr. C. Snouck Hurgronje, of the University of Leyden, who is equally distinguished for oriental learning and for his work in colonial administration. Dr. Hurgronje was sent by his Government to the Dutch East Indies with the mission of studying the relation of Islamism to the life of that region, and subsequently served the colonial government as an adviser on Arabian and native affairs. It was largely through his influence that the Government entered upon the educational experiment which has made the Dutch colony an instructive and inspiring example for all colonial administrations.

UNIVERSITY OF COMMERCE AT ROTTERDAM.[1]

On November 8, 1913, his excellency, Cort van der Linden, Dutch minister of the interior, in the presence of several high Government, provincial, and city authorities, officially opened the Netherlands University of Commerce (Nederlandsche Handels-Hoogeschool) at Rotterdam. This is the first commercial university to be instituted in the Netherlands. The funds for its maintenance were raised from private sources—leading business men and bankers contributing to it—neither the Government nor city granting any subsidy.

The president of the board of directors is Dr. D. Bos, member of the second chamber of the States-General (Congress), one of the foremost authorities on education in the Netherlands; the president of the university is Prof. Dr. G. W. J. Bruins, formerly one of the head officials of the provincial States of south Holland.

The different courses to be taught in the university may be divided into five head groups, as follows: (1) Economics and statistics. (2) Commercial science. (3) Judicial science. (4) Economic history and geography. (5) Technical sciences.

In the first place it is the intention of the school to give a general commercial education. After a course of two years an examination for commercial economies will be held, embracing the following branches: (1) General doctrine and history of economics.

[1] Account furnished by Mr. G. H. Krogh, vice consul general, in charge, Rotterdam, the Netherlands, Nov. 17, 1913.

(2) General doctrine of bookkeeping, balances, and application of mathematics in commerce. (3) Civil law, commercial law, law on bankruptcy, etc. (4) Economic history of the present decade, economic geography especially of the Netherlands and its colonies.

The examination may also include one or more of the following subjects: (1) Credit and banking system. (2) Commercial and general traffic. (3) Insurance. (4) Business doctrine. (5) General doctrine of statistics.

The other courses included in this examination, which are likewise useful, may be divided into two groups, as follows: (1) Those of general nature, i. e., political economy, international law, general history of the present decade, and—

(2) Those in connection with education for a special branch of business, i. e., insurance, banking, traffic, industry, etc.

Both male and female students will be admitted.

Besides general education for commerce, the university will have courses for the following classes of individuals: (1) Candidates for consular and diplomatic examinations. (2) Accountants. (3) Actuaries (insurance). (4) Tutors of commercial science.

As a rule, the course of study for these groups will extend over a period of more than two years.

Special attention will be paid to study for the consular service. Foreign languages will also be taught, as well as bookkeeping.

The university can also be entered to advantage by persons who are in some way connected with trade and commerce, i. e., lawyers, journalists, etc. For them it is, of course, not necessary to follow all the various courses; special arrangements will be made for them and for business men already having a practical knowledge of trade and commerce.

When the Government shall have been found willing to cooperate with the university to institute a doctorate in commercial science, the examination in political economy will be considered one of the preliminary examinations for this doctorate.

The library and archives of the university will be so located as to enable the students especially those having no opportunity to study at home to study there.

The courses commenced November 10, 1913, with an enrollment of 55 students; classes are for the present held in the Exchange Building until suitable quarters are built.

In leading business circles it is the general opinion that the university has a great future, and that it will be of benefit not only to the trade and commerce of Rotterdam, but to the whole country.

BELGIUM.

LEGISLATIVE MEASURES.

The questions of absorbing interest in Belgium relate to the pending bill amending the present law of primary education. Although a compulsory provision is included in the measure, it is in the main objectionable to the Liberals, and its discussion in the Chamber of Deputies and in public meetings revives the intense antagonisms that have attended the passage of previous laws regulating primary education.

The first law on this subject was passed in 1842, 12 years after the separation of Belgium from the Netherlands. This law required every commune to maintain at least one primary school in an accessible place; the school, however, was not necessarily a public school,

that is, established and managed by the civil authorities, but might be a private school (parochial) under private management or adopted and subsidized by the commune.

In 1879 the Liberal Party having come into power, a new law, almost revolutionary in its character, was passed. Every commune was now required to establish at least one public school, the actual number to be determined in each case by the Government. The State was authorized to require also the establishment of an infant school and a school for adults in any commune where this action was deemed desirable. Provision was made for the State inspection of all primary schools; only native Belgians furnished either with the diploma of a primary teacher or of a professor in the lower order of secondary schools might be appointed as teachers. The employment in this capacity of members of a religious order was strictly forbidden, and ecclesiastical instruction in schools was abolished. The program of obligatory studies was extended and religious instruction excluded. This matter was to be left to the family and the churches, but the law provided that clergymen might be allowed the use of a room in a school building, before or after the school session, to give religious instruction to the children of their respective churches.

In 1884 the Catholic Party having gained a majority in the legislature, a new school law was passed, which returned to the conditions under the law of 1842. It provided for the adoption of private schools, restored religious instruction to the programs as an optional branch, opened the teaching service to naturalized foreigners, and in general gave a large measure of independence to the communes with respect to the conduct of schools. In 1895 religious instruction was made an obligatory subject and confided to the clergy, and subsidies for private elementary schools were increased. The laws of 1884 and 1895 gave ecclesiastical authorities control over the schools in a majority of the communes, a policy which is violently opposed by the Liberal Party. The grounds of this opposition are not entirely political. They are found partly in the failure of the schools to meet present economic and industrial requirements; indeed, members of both parties recognize the need of a more rigorous control of primary schools, an effective compulsory attendance law, and an extension of the period and the agencies of education for the industrial classes Without considering here the contest between the two parties for the actual control of the schools, it is instructive to observe the facts with reference to school attendance in Belgium that were brought out in a recent discussion of the pending bill.

SCHOOL ATTENDANCE.

From a statement made in the Chamber of Deputies by M. Lamborelle, deputy from Malines, it appears that for the latest year reported, 1911, the enrollment in all the primary schools of the country was 973,655; the estimated number of children 6 to 14 years of age was 1,187,000; hence 213,345 children of school age were not included in the enrollment. Excluding from this number children above 6 years of age attending infant schools, i. e., 4,439; the 55,174 children above 14 years of age attending schools of adults; also the estimated number of abnormal children, and there remain in round numbers 150,000 children 6 to 14 years of age who were not under instruction.

This fact, however, as observed by M. Lamborelle, is less alarming than the evidences of irregular attendance and early withdrawal from school. With respect to the former it was shown that the primary schools, public, adopted, and subsidized, were open during the year 247.27 days, but the actual number of days' attendance averaged only 199.65 for each pupil. This was equivalent to one day of absence for every five school days.

It was further shown by M. Lamborelle that the majority of pupils never finish the elementary course. Thus in 1911, of 118,433 pupils who left school, 41,484 had attended less than four years, 42,485 between four and five years, and only 31,468 had finished the primary course. "Nowhere in Europe," he said, "excepting in Portugal, Spain, and Italy, is school attendance so unsatisfactory as in our own country." [1]

ACTION OF THE TEACHERS' FEDERATION.

The general federation of Belgian teachers, which is recruited almost entirely from teachers and school officers of liberal tendencies, celebrated its fifty-sixth anniversary at the congress held the present year at Ghent, August 30 to September 4. On this occasion the pending school law was the chief subject of consideration. The demands of the Liberal Party in respect to primary education are embodied in the resolutions adopted by this congress, which provide: First, for the establishment of a public school taught by a secular teacher in every commune in which a demand to that effect is made by the fathers of families comprising 20 children of school age; second, that in every mixed school one or more women teachers shall be employed competent to instruct girls in sewing and other domestic arts; third, that primary schools which do not offer the complete official program of studies shall not be aided by public money; fourth, that religious and philosophic convictions of parents shall be

[1] Cited from Journal des Instituteurs of Oct. 30, 1913.

respected in public schools, and that no member of a religious order shall be appointed as teacher in such schools; fifth, in case any commune neglects its obligation in these respects, the State shall supply the deficiency.[1]

TECHNICAL AND INDUSTRIAL SCHOOLS.

The schools of art and industry, for which Belgium is justly renowned, form no part of the system of instruction to which the pending legislation pertains; they are under the administration of the minister of agriculture and the minister of industry and labor. The schools of the latter department include: Superior school of commerce at Antwerp (founded 1852); provincial school of Hainaut at Mons (1837); industrial schools; apprenticeship schools (ateliers d'apprentissage); professional schools and courses; schools of domestic economy, and housework for girls. The names of the first two and the last in the list sufficiently indicate their purposes. The industrial schools are characterized in official reports as schools intended—

> to give the workman scientific instruction which he is unable to obtain in the workshop; to procure for him the means of improving his material condition and of developing his intelligence; to lead him gradually away from the tyranny of routine, and to increase the economic value of his labor, and thus to enable him to contribute to increased production for his own good and for the national benefit.

These schools are supported mainly by Government and municipal grants. Tuition is free. The sessions are held generally in the evening and on Sunday morning, although several have also weekday sessions. The courses are not uniform, being determined on the technical side by the requirements of local industries. The general course comprises the French or Flemish language, according to the geographical location of the schools; mathematics in its applications to industry; physics, theoretical and applied; chemistry, general and applied; mechanics, hygiene, industrial economy, and drawing. The last named is the basis of the special instruction.

A characteristic feature of this system is the provision made for the training of girls for the commercial and industrial employments which are open to women, and the schools of household industry. The latter have attracted wide attention and are generally recognized as models.

An important outcome of the domestic training of women is the formation of *cercles de fermières*, or societies for promoting the domestic arts in rural communities. These circles number at the present time 200 groups, with more than 20,000 members. In 1912 they held 806 conferences, which were attended by 80,143 women. The local circles are federated by provinces and directed by a national

[1] Journal des Instituteurs, Sept. 25 and Oct. 2, 1913.

committee, the president of which is Mme. la Baronne Rotsart de Hertaing. The federation maintains two journals, *La Fermière*, published in the French language, and *De Bverin*, the organ of the Flemish circles.

Through the efforts of the national committee and under the patronage of the Minister of Agriculture, courses of instruction were established at Brussels during the present year to provide lecturers for the circles, and an examination held to test the knowledge and the power of practical demonstration acquired by the students.

In January, 1912, in cooperation with the Ligue Nationale Belge de l'Education Familiale, the national committee established a series of conferences for women of the aristocracy for the purpose of arousing their interest in rural matters and in opportunities for promoting the general welfare by this interest. The course of instruction in rural economy was particularly successful and has been published in a book which has had wide circulation under the title *Le Bien-être à la Campagne*.[1]

WELFARE ACTIVITIES.

Notwithstanding the fact that in regard to the extension of primary education Belgium is in a backward state as compared with the neighboring Kingdoms of Europe, several communes have made great progress in promoting the general welfare of the children of the poorer classes by means of vacation colonies, medical inspection of schools, and the distribution of clothing and meals to poor children. In 1912 the city of Brussels maintained 17 vacation colonies for children of the public schools, in which 880 children were cared for during an average period of 14 days each. Private associations cared for 1,500 children in similar colonies for an average of 10 days each. Vacation schools maintained by the city enrolled above 800 pupils. Two private societies which supplied food to the poorer pupils of the city schools received aid from the local authorities to the amount of $2,400.

[1] Renault, J.: Les Cercles de fermières en Belgique in l' Education. September, 1913, pp. 357–362.

STATISTICAL SUMMARY.

The scope of the system of public instruction is shown by the following tables, covering the latest official statistics:

Enrollment in primary schools in 1911.

Class of school.	Enrollment.		
	Male.	Female.	Total.
Infant (écoles gardiennes)			275,911
Primary	467,881	466,909	934,830
Schools for adults	133,336	112,956	246,292
Primary normal	2,241	2,726	4,967

Expenditure for primary education in 1910.

Purposes.	Amount.	
	Francs.	Equivalent in United States currency.
Supervision and inspection	846,421	$169,284.20
Normal schools	3,007,352	601,470.40
School buildings	9,153,151	183,030.20
Infant schools	4,448,127	889,625.40
Primary schools	36,824,341	7,364,868.20
Schools for adults	2,450,911	490,182.20
Special objects	657,250	131,450.00
Total	57,387,553	11,477,510.60

Sources of income:	Per cent of total.
State	43.9
Provinces	5.0
Communes	46.3
Fees	2.8
Other local contributions	2.0
Total	100.0

Statistics of secondary education (Enseignement Moyen), 1911.

Classes of schools.	Number.	Students.
Lower grade (degré inférieur):		
For boys	90	19,222
For girls	44	9,777
Total	134	29,199
Higher grade (degré supérieur), for boys	35	8,062
Total secondary	169	37,261
Secondary normal schools:		
Men	2	48
Women	2	159

The total expenditures for secondary education were 6,836,426 francs (equivalent in United States currency to $1,367,285).

Sources of income:	Per cent of total.
State	66.6
Provinces	1.0
Communes	34.4

HIGHER EDUCATION.

Provision for higher education is made by State and private universities and technical and special schools, which form adjuncts of these. The number and distribution of university students in 1912 are shown by the following statistics:

Number of students, 1912.

State universities:	
University of Ghent	1,223
University of Liege	2,861
Private universities:	
Brussels (independent)	1,338
Louvain (Catholic)	2,735
Total	8,157

Distribution of students by faculties and special schools.

Faculties:	Students.
Philosophy	827
Sciences	1,629
Law	1,542
Medicine	1,268
Theology	90
Technical and special schools [1]	2,801
Total	8,157

[1] Adjuncts of the universities.

CHAPTER XXXV.

CURRENT EDUCATIONAL MOVEMENTS IN FRANCE AND SWITZERLAND.

CONTENTS.

France: The new spirit—The crisis in primary education—Higher primary schools—The new era: Demands of the associations; favoring conditions—Provision for adult education—Promotion of moral education—Secondary education: Conservative forces; the program of 1902; current criticisms; a Parliamentary commission; a radical proposition—Universities—French institutes in foreign countries—An eminent educator—Statistical summary.
Switzerland: Introduction—Commercial schools—Agricultural interests—Agricultural schools.

FRANCE.

THE NEW SPIRIT.

One of the strongest evidences that France has reacted against the decadent tendencies which followed the exhausting experiences of defeat after the Franco-Prussian war is the awakening in respect to education. This awakening is indicated by the growing interest of the industrial classes in scientific and vocational education, by the confident tone of university men, and by the spread of French scholastic influences to other nations. These movements, it is true, have not yet affected the official record of education or resulted in legislative action, but they are apparent to everyone familiar with current events in France. They are accompanied by reviving vigor and hopefulness on the part of the élite youth of the nation, which is in striking contrast to the effete and skeptical spirit of the previous generation. This development is discussed in a recent article by Dr. Georges Chatterton-Hill, docent in sociology at the University of Geneva, who attributes the change in great measure to the influence of the works of Paul Bourget, Maurice Barrès, and Henry Bordeaux. With regard to these authors he says:

> These three are incontestably those that appeal most greatly to the intellectual youth of present-day France. And when we have named them we have indicated at once the tendencies of this "intellectual youth," its sympathies and aspirations. The three writers in question are of pronounced conservative leanings; one is an ardent royalist, another is a leader of the Parliamentary Nationalist Party [1]; all three are Catholics and staunch defenders of the church; all three preach the imperative neces-

[1] M. Maurice Barrès, who is deputy for the first arrondissement of Paris.

sity of a return to the time-honored traditions of France, to those traditions of authority and hierarchy and adaptation of capacity to function which the Revolution so imprudently broke with; all three search persistently and indefatigably for an adequate principle of authority, consequently for a principle of social integration and cohesion—and they all find this fundamental principle embodied in religion, in the family, in the attachment of the individual to his native soil. Religious discipline, family discipline, patriotic discipline—on these three aspects of the discipline so essential to the continuity of social existence MM. Bourget, Barrès, and Bordeaux never cease to insist.[1]

Among the indications of this new spirit noted by Dr. Chatterton-Hill are "the patriotism of the intellectual youth of France"; "the love of adventure and the pleasure in sports"—the latter evidenced by the fact that while "ten years ago sport was almost an unknown quantity in the schools, to-day the love of sport in all its forms has become general"; and finally, "the renascence of faith." Of this last sign of reawakening, our author says:

Out of the students of the École Normale Supérieure in Paris upward of 40 are to-day good and true Catholics, partaking of the sacraments of the church, and whose names are inscribed on the list of the Conférence St. Vincent de Paul of their parish. Ten years ago the number of such Catholics at the École Normale was not more than 3 or 4. In the largest State schools (lycées) in Paris—such as Condorcet, Henry IV, Louis-le-Grand—the renascence of Catholicism among the pupils is not less visible. The rector of the Institut Catholique de Paris, Mgr. Baudrillart, has borne witness to this renascence of faith among the "intellectual youth."

The article concludes as follows:

The contemporary youth of France loves realizations; it loves action. Loving action, it appreciates the necessity of order and discipline, without which all action must be sterile. For this reason does it tend to Catholicism; for this reason is it ardently patriotic. Two of the greatest authorities in France, M. Alexandre Ribot and M. Henri Bergson, have expressed their confidence in this youth, their belief in the reawakening of France, in the renascence of French energy; and all the friends and admirers of France may share this belief and this confidence.[2]

In the educational world the new spirit that is moving in France is manifested by a resistance to official domination and the freer expression of individual and professional opinions.

THE CRISIS IN PRIMARY EDUCATION.

The system of primary education, which is essentially the work of the Republic, has reached the stage when new endeavors are necessary for its continued progress. The difficulties which threaten the system were summed up in the Chamber of Deputies by the chairman of the committee on the budget for 1913, as follows:

[1] The works particularly named in the article are Le Disciple, L'Etape, Un Divorce, and L'Emigré, by Bourget; L'Ennemi des Lois, Au service de l'Allemagne, Colette Baudoche, and la Colline inspirée, by Barrès; and La Neige sur les Pas and La Maison, by Bordeaux.

[2] See The Nineteenth Century and After, Vol. XIX–XX, No. 437 (July) 1913, pp. 26, 33, 36. Also No. 441 (November), 1913, pp. 1008–1025. See also Sabatier, Paul. L'orientation religieuse de la France actuelle.

The present budget is facing all the unsolved problems advocated before the Chamber last year with an intensity which justified the thought that reforms would surely follow close upon the promises of that body.

The present inertia will one day press heavily upon the Republic. Not to raise questions at all is a less evil than to raise them without offering a solution. Citizens in general and those persons especially interested naturally take all propositions as assured if they emanate from the Government, and in our excitable democracy anger quickly rises, followed by disaffection and indifference over the disappointments caused by a régime of liberty.

It must be admitted that conditions themselves are in part responsible for present dissatisfaction. By an unfortunate counteraction the Republic, in multiplying schools everywhere, in endeavoring to raise the teachers to a higher plane, in seeking to secure for the children an education, more varied and more extended, has created contradictions that it is unable to overcome, and thus the Government is the victim of its own good intentions.

Schools were opened; then came the ambition to supply them with teachers who had extended their knowledge and increased their pedagogical ability. Hence normal schools were created where a severe course of study held captive for three years young women and young men who were to be prepared for the most delicate service; it was then recognized that the primary school only affords the children very elementary instruction, and therefore higher primary schools were created which offer more extended training. There followed the thought that the children of the small tradesmen would have need of diplomas carrying some social value. Hence the higher primary schools were provided with industrial annexes which gave to industry and commerce young people already prepared for work. Who could criticize this movement? No one.

But consider, however, one result. The higher primary schools, to the number of nearly 430 (430 in 11 years), have drawn to themselves more than 53,000 pupils of both sexes, of whom more than 6,000 have followed the courses of the technical sections (agricultural, commercial, industrial, household economy). Industry and commerce allure and reward them in the larger cities or in the smaller towns, which exercise their attractions, often deceptive, upon the young people of the rural community. This may be well.

Among the young people who follow these courses of the higher primary are found those who formerly presented themselves as candidates for the normal schools; commerce, industry, stenography, typewriting, clerical positions in the post and telegraph offices, all these opportunities now open before them. Here in great part is the explanation of the dangers which to-day threaten primary education. The candidates for the men's normal schools decline, and the discouraging statistics which were published for 1910 continue for the year 1911 to offer proof that this decline is not an accident, but a law.

Thus the Republic becomes a party to the movement. Without doubt this is a temporary state. The fruitful seed of culture, the increase of knowledge, the mental equilibrium which comes from knowledge, the more perfect education of the citizens; the economic emancipation of women, before whom now open other careers than that of marriage and who have thus liberty of choice; all this is noble and grand, but for the time the first difficulty that confronts us is seen at once in the statistics which enable us to count, one by one, the losses in the number of candidates for teachers' positions.

The decline in the attendance upon the normal schools and the growing discontent of the body of the teachers are signs of what was termed by a senator "the crisis of the personnel of primary education, a crisis at once moral and economic." The actual decline

in the number of candidates for the normal schools is not great; in the case of the schools for men the number fell from 4,684 in 1905 to 3,849 in 1911, and in the case of schools for women, from 7,949 in 1907 to 7,445 in 1911; but it is a steady falling off, and the hope of a countermovement through the prospect of better salaries has been disappointed by the fact that the appropriations approved by the Chamber of Deputies have not yet materialized. This failure increases the unrest among the teachers which was excited last year by the order for the suppression of their associations.

Alarm is also caused by the increasing difficulty in enforcing and extending the compulsory school-attendance law. This law covers the period 6 to 13 years of age, but it is not rigidly enforced and exemption can be secured at 12 years of age by passing the leaving certificate examination. The absorbing questions of the year, questions discussed in Parliament, in the journals, in educational associations, relate to the two essential conditions: The continued efficiency of the teaching force and the improvement of school attendance.

THE HIGHER PRIMARY SCHOOLS.

France was one of the first nations in Europe to make provision for extending the education of the common people beyond the mere rudiments, with special reference to their industrial needs. For this purpose two classes of schools have been established: Higher primary schools and practical schools of commerce and industry. In the former the studies of the elementary primary schools are extended with special reference to vocational training; the latter are essentially vocational. The necessity of such provision was foreseen by Guizot; and the law of 1833, which bears his name, authorized the establishment of higher primary schools, but outside of a few cities which had already organized such schools the law had little effect. In 1878 the General Government appropriated $22,000 to aid communes in establishing schools of this order; the amount has been augmented from year to year and has proved a stimulus to local effort. Complications soon arose, however, from the endeavor to include in the same category schools for general instruction and a class of schools, industrial or commercial in character (écoles professionnelles), that had been established in a few cities. Various experiments were tried in the endeavor to harmonize the claims of the general and special courses of instruction, and finally in 1892, a law was passed establishing two different classes of schools, i. e., higher primary schools, and practical schools of commerce and industry, under separate administrations.

The higher primary schools have remained under the ministry of public instruction, and are supported by the combined action of the State and the communes. The State assumes the legal salaries of the

regular staff, which amounts to about five-sevenths of the total salaries required to maintain the full complement of teachers. The municipality (commune) must pay the salaries of teachers in charge of the workshop and also of the persons employed as technical and industrial teachers.

The expense for buildings, furniture, apparatus, etc., must also be met by the commune.

Although the higher primary schools are established in each case by a particular commune or town, most of them draw pupils from the surrounding districts, and consequently they have boarding houses attached. These, like the school buildings, are furnished by the commune, and are sometimes managed by a burser (économe), who is an employee of the communal authorities; in general, however, in the provinces the director of a higher primary school manages the boarding department also. About half the higher primaries for boys and the two-thirds of those for girls have boarding departments. In other words, France has a system of communal boarding schools with the staff of each supplied at the expense of the State. In these schools tuition is free, and the State assists in bringing them within the reach of poor, but promising, youths by a system of scholarships covering living expenses. Similar funds are also provided by departments and communes.

The system of higher primary schools is excellent in theory, and the schools themselves, as a rule, thoroughly efficient, but they reach only a small proportion of the children, as appears from the enrollment. The following table includes the higher primary schools, the practical schools of commerce and industry, and the four State schools of the same general order, which are intended as models illustrating the highest theory of education adapted to the industrial classes.

Enrollment in certain schools for industrial classes.

Classes.	Year.	Pupils.		
		Boys.	Girls.	Total.
Higher primary schools and continuation classes	1910	51,366	48,025	[1] 99,391
Practical schools of commerce and industry	1911	10,102	2,687	12,789
National technical schools	1911	1,588	.....	1,588

[1] Of this total, about 48,000 were in continuation classes.

The total enrollment in all the schools here considered, viz, 113,768, is about one-sixth the number of children who might be continuing their studies in schools of this grade.

THE NEW ERA.

DEMANDS OF THE ASSOCIATIONS.

From every point of view it is seen that primary education in France is facing a crisis. The period of enthusiasm which marked the early years of the Republic and the period of struggle between church and state which followed have passed. New interests have developed, demanding new adjustments and purposes in primary education. The call for a radical change in methods and aims has been sounded by the Ligue de l'Enseignement, an association founded in 1870 by Jean Macé, and which has ever since been the source and motive power in educational reform.

At the congress of this society held in August of the current year at Aix-les-Bains, it was declared that France has depended too much upon laws, regulations, and penalties for carrying out the compulsory attendance requirements, without regard to the causes that lead to irregularity; among these are the necessities of life, the increased cost of living, the decline of hand work, and the exodus of the peasants from the country to the city. To offset these influences an effort must be made to adapt school programs, time tables, and the entire conduct of the school to the economic and industrial conditions of the individual community. "The school for life, the school for the community"—this was the formula, the rallying cry adopted by the congress. This action marks a break in the deadening uniformity of the French primary schools. It was resolved by the congress, however, that the new purposes do not require the destruction of the school system as it was organized by the preceding generation, but simply its adaptation to present conditions. It would suffice for the central authority to issue a minimum program, which should be obligatory and taught during the morning hours, and to leave the afternoon session for studies and practical work appropriate to each locality. Furthermore, it was advised that twice every week the whole rural population should be invited to the school to receive instruction in matters of practical concern in their daily lives. As one member of the congress, M. de Monzie, said in the closing address:

> This is not revolution, but evolution; the beginning of a great reform which follows the law of progress, the supreme law in a democracy.

The association of women teachers has emphasized the call for reform by specific demands. The following is the substance of the resolutions bearing on the subject which were adopted at the congress of the association held August 16–18 in the city of Bordeaux:

Coeducation.—Resolved, That the associations of women should adhere to the principles of coeducation and that concerted action should be taken with reference to measures necessary to secure the cooperation of the public authorities in this effort;

With this end in view the executive committee of the federation is instructed to arrange for conferences, articles in the public press, and local meetings for the purpose of increasing the number of supporters and defenders of this policy, in order that the text of the education law of October 30, 1886, may be amended in such a way that it will no longer be left to a municipal council opposed to this policy to prevent the establishment of mixed schools or the transformation of existing separate schools into mixed schools;

That women teachers should no longer be assigned wholly to the lower classes of the schools.

Equality of salaries.—Having in view the recent act of Parliament reducing somewhat the difference between the salaries of women and men teachers, this federation expresses its appreciation of the work of the committee of the Chamber of Deputies which secured this action, but regrets that the full principle of equality of salaries was not sanctioned by a formal vote of Parliament; finally, the federation resolves that the Government shall be urged to include in the estimates for 1914 the sums necessary for securing equality of salaries for women teachers on the one side and the men teachers on the other, in all classes of primary schools, viz, primary, higher primary, and normal.

Inspection service for women.—The congress, considering that there are in France only five inspectresses of primary instruction, and only nine Departments which are provided with inspectresses of infant schools (écoles maternelles) as authorized by law, and further that it is for the interests of the women teachers of France to oppose the idea that they are not competent for administrative services in connection with schools for girls and infant schools, therefore resolved:

That the minister of public instruction be urged to appoint inspectresses of primary education and inspectresses of infant schools in all the Departments.

Women on educational commissions.—In the belief that men, no matter how able they may be, have not all the qualifications necessary for determining the conduct of schools for girls and of infant schools, and to secure in the highest possible degree the well-being of the pupils in such schools, this congress resolves:

That the minister of public instruction be urged to request the departmental prefects to propose for appointment to the local school committees at least two women in each case.

That the number of women should be greatly increased in the membership of school committees, in the administration of the local school funds, in the administration of municipal school colonies and vacation schools, in the committees appointed for the purchase and supervision of public libraries.

This congress also adopted an important resolution in favor of woman suffrage, pledging support of the organization in efforts to secure the speedy passage of a bill already introduced in the Parliament, extending to women the right to vote in municipal and cantonal elections, and to be nominated as candidates in those elections.

The association itself by the union in a single body of primary teachers and professors of secondary schools is promoting the consciousness of a common purpose in the different orders of instruction.

FAVORING CONDITIONS.

Under the rigid organization of the French system of public instruction, new adjustments are more difficult than in a flexible system like that of the United States. In spite, however, of the all-pervading officialism, French schools are saved from dead formality by the lively spirit of the teachers and the dramatic impulses of both teachers and pupils. A little theater is no uncommon adjunct of even humble schools, and in these the associations of former pupils (the Pétites Amicales) meet for mutual helpfulness and recreation; here they declaim extracts from their classic poets, and with the aid of the pupils of to-day enact improvised scenes or even complete dramas.

It should be considered also that the conditions of industry in France prevent in a measure the extreme evils of early withdrawal from school. Although a fraction of the children who escape this obligation while still very young become mere vagabonds or even criminals, the majority go to work at the industries of their parents, manual or agricultural, as the case may be. In Paris, and all the large cities, hand industries still thrive, and the craftsman's home is also his shop; in the country the great estates have given place to small farms in the hands of peasant owners. It is estimated that there are more small holdings of land in France than in Germany, England, and Austria combined. The artisan of the cities and the peasant proprietors are proverbially thrifty and frugal, and it is the savings of these classes, received and controlled by three or four banking companies, that have given France its financial predominance in Europe. Economy and frugality are native habits practiced in every humble household in France. The school lessons on these modest virtues simply enforce the living example of the home. This practical spirit of the French people insures support for a reform movement as soon as its economic promise is revealed to them.

PROVISION FOR ADULT EDUCATION.

The unsatisfactory state of primary education at the present time is offset by the vigor of the movement for adult education. This work has been fostered by various agencies which were organized in 1894 under the direction of Edouard Petit, inspector general of public instruction, who brought to the effort great administrative ability

and contagious enthusiasm. The report of M. Petit for 1912–13, the nineteenth in the series, gives abundant ground for the confident spirit by which it is animated. From the statistical summary presented, it appears that the number of evening classes conducted during the year reached a total of 54,493 (32,159 for young men and 22,234 for young women), an increase of nearly 2,000 classes over the previous year. The number of persons in attendance upon these classes was 644,306. Of the entire number of classes, 6,000 were maintained by societies for popular instruction, chambers of commerce, etc. The number of popular lectures comprised in the work reached a total of 61,027. In addition to the classes for systematic instruction and the popular lectures, an effort is made to promote the spirit of solidarity and helpfulness among the people. To this end, societies called Mutualités Scolaires are formed. These consist of former pupils of the local schools and members drawn from the wealthier classes who are interested in the welfare of their communities. The mutualités comprise altogether 874,859 paying members, and during the current year contributed more than 5,000,000 francs ($1,000,000) for benevolent purposes. In addition, the movement comprises 6,587 associations of former pupils, "*petites A*" (1,995 for young women and 4,592 for young men), with a total of 700,000 members. To the number of these societies should be added 2,000 maintained for athletic sports, or military exercises.

The work of instruction by means of classes and popular lectures is largely carried on by the teachers of the primary schools, assisted in many sections by the professors of secondary schools and universities. The number of primary teachers giving their services to this cause during the year was 81,553, and the number of collaborators, not engaged in the schools, 13,710. The report calls special attention to the extended use of the cinematograph in the lectures and to the growing demand for systematized courses of instruction in civic affairs and social hygiene. An interesting development from this work is the formation of what are termed *patronages;* that is, local societies pledged to look after the welfare of the children of their respective communities. These societies maintain crêches, where mothers obliged to work can leave their infant children safely, and workshops in which the pupils of the public schools receive manual instruction on Thursday and Sunday when the schools are not in session.

The work of adult education covered by the report of M. Petit is purely secular, and therefore encounters opposition from the forces opposed to the public schools. Hence, it rallies to their support, or as expressed by M. Petit:

> This organization defends the school, supports its influence over the pupils during and after the school age. By the side of the defense of the law, which is a matter for

the legislature, it establishes defense by private initiative, which is the business of citizens.

The opinion is expressed by the leaders in this work that the time has come when it should receive support from the Government. The Ligue de l'Enseignement, at its annual meeting for 1912, renewed the resolution which has been adopted for 10 successive years, to the effect that a systematic organization of the classes and lectures should be substituted for the voluntary activities which have to be worked up each summer, and that the legislature, in any measure adopted for prolonging the period of obligatory education, should include secondary education for the masses.

It was urged by the Ligue that measures should be adopted obliging apprentices to follow technical courses of instruction, and that the time required for this purpose should be included in the number of hours allowed by law for the working day. Thus it appears that opinion in France has reached the same stage as in England, in which a similar demand is made upon Parliament, coupled with the proviso that employers shall continue the wages of apprentices during the years of training.

PROMOTION OF MORAL EDUCATION.

A second movement of great significance relates to the promotion of the moral development of the people through the agency of the schools. The widespread interest in this subject, manifested by two international congresses, is largely due to the activity of French leaders, who have succeeded also in organizing an association of the forces interested in that purpose. This society, La Ligue Française d'Education Morale, has recently received a donation of 15,000 francs ($3,000) for the promotion of prize contests for the preparation of a manual of moral education embodying the principles of the society. As set forth in the first article of its by-laws, these principles are as follows:

> This association was founded at Paris under the title La Ligue Française d'Education Morale, independently of all parties—political, philosophical, religious—with the express object of promoting moral education by the spread of principles universally recognized as essential in the conduct of individuals and to the life of society.
>
> Determined to observe religious neutrality and to reserve to each of its members entire liberty of opinion, the Ligue will spread those moral ideas upon which there is sufficient agreement to make possible the collaboration of all right-minded people.
>
> In order to apply these principles to the moral education of both sexes under various social conditions, and in particular in school relations, this society will endeavor to discover the best methods of forming character, of developing the spirit of solidarity, and of strengthening the idea and the sentiment of duty.

In a public appeal for support, the Ligue declares its belief that whatever may be the differences in religious or philosophical doctrines by which individuals come to the conception of a universal moral

order, these differences have never prevented candid minds from understanding what is meant by an "honest man." In the language of the appeal—

> The entire world is unanimous in the conviction that integrity, propriety, courage, respect for one's self and his neighbor, devotion to one's country and to humanity, are precious virtues, and that it is necessary to oppose at any price degradation of manners, egotism, brutal passions, alcoholic indulgences—in short, all the powers of corruption that threaten democratic societies.
>
> The prizes offered for the proposed manual are as follows:
>
> The first prize of 5,000 francs for the best article on the subject.
>
> The sum of 5,000 francs to be divided between three manuscripts, classed immediately after the best.
>
> A sum of 5,000 francs to be divided in prizes of various value from 200 to 500 francs according to the judgment of the jury respecting manuscripts placed in a third class.

This competition is open to all persons interested in the practical problem of moral education, and particularly to all teachers of both public and private schools.

The jury to decide upon the manuscripts comprises many of the most eminent men in France. Its president is M. A. Ribot, of the French Academy.

SECONDARY EDUCATION.

CONSERVATIVE FORCES.

Secondary and higher education are closely related as regards scholastic purposes, the secondary schools preparing students for the specialized courses of the universities. The two departments are, however, separately administered, and the changing demands of modern life have affected the secondary schools even more deeply than they have the universities. Under the pressure of these demands it is impossible to continue the exclusiveness of secondary education and its remoteness from current affairs. At the same time France has more reason than any other country for maintaining classical studies and the ideals of culture which they inspire. It is the discipline of the humanities carried to its highest perfection in the schools of France that has determined the characteristics of the national art and literature, the unity, proportion, and esthetic finish which are the admiration of all other nations.

The diploma of secondary education has also been required for admission to official posts, and consequently the aptitudes which the old system developed accord with the general tone and requirements of these services; thus what may be termed the usages of statecraft favor the retention of the established course of secondary studies. On the other hand, the industrial applications of science and the vast commercial interests of modern life necessitate a change of emphasis in the curriculum of schools from which the nation draws its directive forces and its power of initiative for either public affairs or industrial enterprises.

THE PROGRAM OF 1902.

The program of secondary studies authorized by a law of 1901 embodies the new conception of secondary education. Classical studies which had dominated the former programs were placed on a level with modern languages and the sciences, and the endeavor was thus made to comprise new orders of instruction within the institutions that had long been devoted to the humanities. This experiment, it will be seen, differs radically from the course pursued in surrounding countries, especially in Switzerland and Germany. In these nations there have been created side by side with the gymnasia, or classical schools, modern schools (higher realschulen, real progymnasia), etc.

The French experiment has naturally been watched with great interest; but, although ten years have elapsed since the change went into effect, it is still difficult to judge of its value. Complications have also arisen by the development of the higher primary schools in certain places, which, although bearing the name "primary," are often modern secondary schools of high grade.

CURRENT CRITICISMS.

In submitting the education budget for 1913 to the Chamber of Deputies the chairman of the committee, M. Viviani, calls attention to the fact that the discussion continues in respect to the direction of secondary education, and that scarcely a week passes without some severe criticism of the new system. He says:

> It is the fashion to-day to publish the results of certain examinations and official investigations which expose all the defects of the candidates, and then to declare that people no longer learn to write and compose, and that even spelling is neglected. Nevertheless this is a dangerous game, this judging by the reports of a few investigations or examinations. An abundant harvest could be gathered from the same sort of reports, in which, in the very same terms, the inspectors for a time long preceding 1902 dwelt upon the failure of students.

In respect to the repeated declaration that the study of Latin is falling into decay, M. Viviani continues:

> It is nine years since the reform programs were adopted. But never under the ancient régime did the Latin classes contain more pupils than are found to-day in sections A, having Latin and Greek; section B, Latin and modern languages; and section C, Latin and sciences. This last section, it is true, attracts the greater number of the pupils, but this is cause of satisfaction, for in contact with Latin and sciences the young mind is opened at once to the works of imagination and of reason.

It is asserted by many critics of the present system that the results of Latin and Greek are mediocre in the highest classes, that French has not gained anything from the diminution of Latin and Greek, and that the sciences and mathematics are weak or superficial. But in the opinion of M. Viviani these conditions indicate too much haste in

the lower classes and the endeavor to cover too much ground, rather than defects in the plan of studies. The difficulty arises, he says, "from the struggle between quality, which was formerly the main thought, and the quantity of the matters now brought to the attention of the student." He reminded the Chamber of Deputies that while "the reform of 1902 was not necessarily final, it has the same right as other reforms to claim time for experience." Meanwhile it must be allowed that this reform "has made no effort to exploit itself at the expense of classical instruction, of which the intrinsic beauty was never in question, but whose adequacy for modern requirements was manifest."

COMMISSION OF INQUIRY.

The great importance of the subject is indicated by the appointment of a parliamentary commission which is engaged in an exhaustive inquiry as to the working of the new program. Evidence is sought from parents, men of affairs, and business men, and in this wide scope the inquiry merges into the broader question of a reorganization of the entire system of public instruction.

A RADICAL PROPOSITION.

The plan of a unified national school is now before the Chamber of Deputies in a bill introduced by M. Ferdinand Buisson. The professed intention of the bill is to establish equality of opportunity for all children. For this purpose its author would put an end to the dualism of the existing system which provides one kind of school for the masses and another for those favored of fortune, and substitute "the national school," organized in three cycles.

In the plan outlined by M. Buisson, the first cycle is devoted to elementary primary education to be given uniformly to all children 5 to 11 years of age; the second cycle is for children from 11 to 14 years of age; in this cycle the education will be varied according to the requirements or aptitudes of the pupils, but in spite of these pedagogic differences perfect social equality will be maintained; in the third cycle education will be distinctively vocational (professionnelle), the term being used in the widest sense.

The scheme revives projects that were sketched by the leaders of the early days of the French Revolution, before its sanguinary extremes, and it resembles in many particulars the ideals of national education proclaimed by the Liberal Party in England, and is similar in principle to the movement for the "Einheit school" in Germany. Naturally M. Buisson does not anticipate any immediate action respecting the proposition. He has simply adopted the surest means of exciting public interest and discussion in regard to the subject.[1]

[1] See Revue Universitaire, Mar. 15, 1913, pp. 252-255.

THE UNIVERSITIES.

The universities, in common with the primary schools, are suffering from the delay on the part of the Government in providing for extensions whose importance is fully recognized. Increased appropriations are greatly needed for laboratory equipments, both for the faculties of science and of medicine; although the Government has expended during the last 40 years a large sum, amounting to $20,000,000, for the installation of laboratories, their equipment has not kept pace with this initial expenditure. This fact was urged upon the attention of the Chamber of Deputies by the chairman of the appropriation committee, who reminded that body that while foreign students were attracted to the faculties of law and letters by the fame of their professors, their lucid presentation of general ideas, and their talent for synthesis, the faculties of science could not compete with those of Germany and other neighboring countries by reason of their meager equipment. In respect to medical faculties, the need of fuller equipments and of the extension of courses of instruction in many important directions is recognized by the Government as well as by the medical profession. In 1912 a commission was appointed for the special investigation of the needs of this department, but so far no practical results have been accomplished by this body. The delay in these matters is apparently due to the increased military expenditures necessitated by the general uncertainty of European policies.

FRENCH INSTITUTES IN FOREIGN COUNTRIES.

The chief events of the current year in the department of higher education pertain to measures by which the university leaders of France are seeking to maintain a sort of intellectual dominion in the world. This is the purpose of the French institutes established in foreign countries under the auspices of different universities. The University of Grenoble led in this work by opening an institute at Florence, the University of Nancy followed with an institute at St. Petersburg, and within a year a third institute has been opened at Madrid by the combined action of the Universities of Bordeaux and Toulouse, and one at London under the auspices of the University of Lille.

The French Institute at Madrid, Spain, was inaugurated in Easter week, 1913. The importance of the event was emphasized by the presence of distinguished representatives of the universities of both countries, and the ceremonies were presided over by M. Steeg, former minister of public instruction, who was present as the official delegate of the French Government. Numerous festivities enlivened the more formal exercises, and the memory of the event will be per-

petuated by a special volume to be published by the French universities. The keynote of all the addresses and ceremonies was the spirit of Latin fraternity which inspired the thought of the institute, and from which important results, both for Spain and for France, are predicted. These anticipations rest upon the historic evidences of the common origin of many institutions characteristic of both countries. One great purpose of the institute is to promote researches in respect to these origins, by means of the archives, museums, and libraries of Spain. The importance of the facilities thus opened to French savants was dwelt upon by Dr. Paul Lapie, rector of the académie of Toulouse, who delivered the opening address at the inaugural.

Dr. Lapie also discussed the opportunities afforded by the new institution for the study of the Romance languages and literature, subjects which are specially cultivated in the universities of southern France. In regard to the rôle of a professor of living languages he reminded his hearers that it is no longer sufficient to study the idiom of a language by the aid of books. In this connection he said:

> A living language can not be found in the printed page; it is the language spoken by living people, among whom it is necessary to live in order to comprehend the thoughts and sentiments that animate the words. A professor of Spanish ought to teach not only words, but the things that pertain to Spain. He is not simply a man who can pronounce correctly the *j* and can discern the difference between *para* and *por;* he should be rather a man who has a love for Spain, who is familiar with its various Provinces, and who brings to his class, as it were, its atmosphere and brilliance. Neither at Bordeaux nor at Toulouse is it possible for our students to come fully under the Spanish influence. In order that they should become true professors of the Spanish language, it is necessary that they should leave their native land and enter the classes of their colleagues beyond the mountains and make long pilgrimages to the Cathederal of Toledo and the Museum of Prado.

This idea, entertained at Bordeaux and Toulouse as far back as 1896, gave rise to the Bulletin Hispanique, and later led the administration to provide for a permanent work of research and excavations in Spain. Step by step these relations have been extended, and finally have culminated in the institute at Madrid.

The French Institute at London is the outcome of plans formed at the University of Lille, and cordially seconded by the Université des Lettres Françaises already established at London, and which assigned spacious quarters to the new institute in its own building, the Marble Arch House.

The preliminary announcement of the institute at London states that it is organized in three departments: The first of these is intended to impart general information in regard to French life, policies, and literature by means chiefly of lectures. The second department is intended for the instruction of English professors of the French

language, for which purpose systematic courses in grammar, conversation, literature, etc., will be offered. The third department is devoted to commercial interests and will provide courses of instruction and general information pertaining to commercial affairs, and in addition, will serve as a place of meeting and an advisory office for young Frenchmen employed by commercial houses in London.

Measures for establishing similar relations with the Latin American countries are the latest outcome of this international activity on the part of the French universities. So far no institutes have been opened in these countries, but various organizations have been formed looking toward this final result. Striking proof of the vigor of the international movement is afforded by the number of organizations engaged in the work. The following list includes only those having either a national character or represented by special organizations in the principal university towns of France.

Various organizations and institutions maintained by the French for the propagation of the French language and culture in foreign lands.

Comités de Patronage des Étudiants Étrangers.—Local; founded in connection with the different universities. Besides welcoming foreign students and doing everything necessary to make their stay as pleasant and profitable as possible, they help in arranging for special courses suited to the needs of foreigners and also maintain general and vacation courses especially for foreign students. They publish a wide variety of announcements, annuals, etc.

Alliance Française.—Association pour la propagation de la langue Française à l'Étranger et dans les colonies. Has 50,000 members and 450 branches. Publishes an annual and a great variety of circulars and announcements.

Special institutes.—Institut Français de Florence, Italy; Institut Français de Saint-Petersbourg, St. Petersburg, Russia; Institut Français de Madrid, Madrid, Spain; Institut Français de Londres, London, England.

Groupement des Universités et Grandes Écoles de France pour Rapports avec l'Amérique Latine.—Maintains a special library; publishes a monthly bulletin, and edits books and other publications having to do with Latin-American affairs. Published last May in Spanish a volume containing 354 pages, entitled "Las Universidades y Grandes Escuelas de Francia."

Comité France-Amérique.—A large and very important organization. Publishes a monthly bulletin.

Office National des Universités et Écoles françaises, founded in 1910; has for one of its purposes that of acquainting foreigners with educational facilities offered by France and with the various committees and societies which look after the interests of foreign students.

Société des Amis de l'Université de ———.—Local; founded in connection with the universities.

Société d'Extension Universitaire.—Local; founded in connection with the universities.

Association générale des Étudiants de l'Université de ———.—Local; founded in connection with the different universities.

Association générale des Étudiants de ———.—Local; founded in Paris and probably other centers for all students in any of the higher institutions, including the university.

Bureau des Renseignements.—Local; established in connection with the universities. The one in Paris is in the Sorbonne and serves a wide purpose. It was founded in 1903 by the city of Paris and by the university.

These societies and associations, although founded in the interest of all students, French and foreign, contribute more or less to the propagation of the French language and culture by the special provisions they make for foreign students, by encouraging and aiding in the maintenance of special courses for the benefit of foreign students and by encouraging and aiding in the maintenance of special vacation courses and schools for their benefit. They publish and circulate general and special announcements, booklets descriptive of the different institutions with which they are connected and the special courses offered, and some of them publish rather elaborate annuals.

AN EMINENT EDUCATOR.

France has suffered great loss in the death of Dr. Jules-Gabriel Compayré, who was not only eminent as a university teacher and administrator, but achieved world-wide distinction by his contributions to the literature of education. He was a graduate of the École Normale Supérieure, and began his professional career in the lycées of Poitiers and Toulouse, and in 1874 was appointed professor of philosophy in the faculty of Toulouse. He quitted this post in 1881 for political activities and was elected deputy, in which capacity he served until 1889, when he withdrew from politics and was soon after appointed rector of the University of Lyon, which is second only to the University of Paris.

As an author Dr. Compayré is perhaps most widely known by his Histoire des Doctrines de l'Education, which was published in 1879, and which has been translated into several languages and has passed through numerous editions. He contributed important works to the psychology of childhood and youth, among these L'Evolution Intellectuelle et Morale de l'Enfant, which has also been translated into English. His last contribution to educational literature is a series of books upon the great educators, which are marked by discriminating judgment and philosophical analysis. He continued his literary labors almost to the hour of his death, which occurred on the 23d of March of the current year. Dr. Compayré was naturally held in high esteem by American educators, for he did more than any other French writer to interpret the spirit of American institutions to his countrymen and to familiarize them with the work of American educators.

STATISTICAL SUMMARY.

The administration of public instruction in France is centralized in a cabinet officer, the minister of public instruction and fine arts. Education is organized in three departments: Primary, secondary,

and superior, each under a director who is second only to the minister in authority.

For purposes of local administration France is divided into 17 academies, each of which comprises a university, or university faculties, and a definite number of secondary schools, lycées, and colleges, under the general direction of the rector or chief of the academy, who is responsible to the minister of public instruction. The departments, which are civil districts, form areas within the academies for the administration of primary schools. The immediate direction of the latter is committed to academic inspectors.

Official reports covering operations of each department of education are issued periodically; reports pertaining to primary education appear at intervals of five years. The last report of this series brought the record to the close of the scholastic year 1906–7. Reports pertaining to secondary and to higher education are published at longer intervals. The only official publication summarizing statistics respecting the entire system is the Statistical Annual issued by the minister of labor. From this source the following statistics are mainly derived: [1]

STATISTICS OF PRIMARY EDUCATION.

The department of primary education includes infant schools, which in France, as in England, are part of the public-school provision; elementary primary schools which cover the period of obligatory attendance, ages 6–13 years; higher primary schools covering the ages 12 to 15 or 13 to 16; and primary normal schools.

TABLE 1.—*Statistics of primary schools, France (including Algeria), 1910–11.*

Classes of schools.	Schools.	Teachers.	Enrolled pupils.
Infant:			
Public	2,701	6,875	515,068
Private	1,266	1,740	105,854
Total	3,967	8,615	620,922
Elementary and higher primary:			
Public—			
Boys' and mixed	69,312	57,896	2,482,957
Girls'		62,358	2,121,638
Private—			
Boys' and mixed	13,176	8,316	359,324
Girls'		28,411	690,875
Total	82,488	156,981	5,654,794
Primary normal schools:			
For men	84	834	4,466
For women	82	892	4,892
Total	166	1,726	9,358

[1] Ministère du travail et de la prévoyance sociale. Annuaire statistique, v. 31, 1911. Pub. 1912.

From Table 1 it will be seen that the total enrollment in the primary schools for the year named was 5,654,794.

A certain portion of the population depend upon the preparatory departments of secondary schools (lycées and colleges) for the elementary instruction of their children. These divisions in 1911 comprised 39,896 pupils, which, added to the number in primary schools, gives a total enrollment of 5,694,690 pupils in elementary schools, or divisions above the infant grade. This total is equivalent to 14.4 per cent of the population, a ratio relatively the same as the higher ratios in neighboring countries in which the child population exceeds that of France.

Expenditure for primary schools.—The current expenditure for primary schools, which is borne almost entirely by the State, amounted in 1910 to 216,937,826 francs ($43,387,565), equivalent to $7.68 per capita of enrollment. The commune provides the site for a school and the school buildings, the State advancing money when necessary to assist in the latter work. The commune also provides residence for the head teacher of a school or a money equivalent, and is legally required to maintain a fund (caisse des écoles) for furnishing aid, i. e., food and clothing for destitute children of school age.

TABLE 2.—*Auxiliary agencies in connection with public schools.*

Agencies.	Number.	Number of children cared for.
Children's nurseries	86	5,899
Improvised recreation classes	316	14,806
Classes for supervising studies	358	18,267
School excursions	487	22,270
School colonies (summer)	.....	7,645
Vacation schools	[1] 277	28,733
Libraries:		
School	416	[2] 427,530
Pedagogical	[3] 6	[2] 2,955

[1] Comprising 615 classes.
[2] Volumes.
[3] Not including the library of the National Musée Pédagogique with 37,213 volumes, nor that of the Municipal Musée Pédagogique with 13,150 volumes and sets.

TABLE 3.—*Funds for maintaining welfare activities in relation with the primary schools.*

Receipts and disbursements.	Francs.	United States equivalent.
Sources:		
Public appropriations (chiefly city)	1,430,450	$286,090.00
Private contributions	2,537,382	507,476.40
Total	3,967,832	793,566.40
Disbursements:		
For shoes and garments	323,570	64,714.00
For food (cantines scolaires)	1,389,690	277,938.00
For school excursions and vacation colonies	444,583	88,917.00
Other purposes	155,106	310,213.00
Total	3,708,908	741,782.00

STATISTICS OF PUBLIC SECONDARY SCHOOLS.

To the department of secondary education pertain the State lycées and the communal colleges for boys, all of which follow the official program adopted in 1902. The colleges do not always offer the full classical course, and the students who desire to secure the bachelor's diploma for either one of the four parallel courses generally complete the same at one of the lycées of their own academic division or even at Paris. The State lycées and the local colleges for girls are separately administered and have a special curriculum.

TABLE 4.—*Enrollment in public secondary schools for boys, France (including Algeria), 1911.*

Institutions.	Number.	Students.
State schools:		
Lycées	112	61,194
Colleges	232	36,318
Total	344	97,512

TABLE 5.—*Enrollment in public secondary schools for girls, France (including Algeria), 1911.*

Institutions.	Number.	Students.
Lycées	51	19,259
Colleges	78	11,529
Secondary courses	56	5,509
Total	185	36,997

TABLE 6.—*Distribution of pupils in the various sections of secondary schools as reported Nov. 5, 1911.*

Classes of schools.	Secondary division.		Special section.	Preparatory division.
	Classes preparing for the higher technical schools.	Other secondary classes.		
Lycées for boys	3,367	42,020	693	15,114
Communal colleges for boys	.....	21,583	4,634	10,101
Lycées for girls	.....	11,353	.....	7,906
Communal colleges for girls	.....	6,753	.....	4,776
Special secondary courses for girls	.....	3,504	.....	1,999
Total	3,367	85,110	5,327	39,896

STATISTICS OF HIGHER EDUCATION.

The department of higher education comprises the universities, 16 in number, university schools, and special schools under the minister of public instruction. The universities form the crown of the academic systems, and although they secured a measure of independence by the law of 1896, they are State institutions, subject to

official control and deriving their main support from State subsidies. The academic rector is the virtual chief of the university within his jurisdiction. The universities are situated at the chief cities of their respective academies and are named from these. In the following table the schools not forming part of a university organization are indicated by stars.

TABLE 7.—*Distribution of students in State universities and university schools, Jan. 15, 1913.*

Location.	Men.			Women.			General total of students.		
	French.	Foreign.	Total.	French.	Foreign.	Total.	French.	Foreign.	Total.
Paris	12,903	2,133	15,036	978	1,090	2,068	13,881	3,223	17,104
Aix-Marseille	1,006	26	1,032	102	4	106	1,108	30	1,138
Amiens *	68	2	70	6	2	8	74	4	78
Angers *	82	.....	82	.....	.....	.....	82	.....	82
Besançon	209	20	229	22	11	33	231	31	262
Bordeaux	2,371	32	2,403	136	9	145	2,507	41	2,548
Caen	589	9	598	42	3	45	631	12	643
Clermont-Ferrand	224	8	232	44	4	48	268	12	280
Dijon	839	55	894	60	20	80	899	75	974
Grenoble	963	205	1,168	103	214	317	1,066	419	1,485
Lille	1,596	53	1,649	165	14	179	1,761	67	1,828
Limoges *	82	.....	82	1	.....	1	83	.....	83
Lyon	2,740	156	2,896	153	35	188	2,893	191	3,084
Montpellier	1,664	263	1,927	61	167	228	1,725	430	2,155
Nancy	322	3	325	6	.....	6	328	3	331
Nantes *	1,343	448	1,791	41	112	153	1,384	560	1,944
Poitiers	1,182	10	1,192	63	2	65	1,245	12	1,257
Rheims *	55	.....	55	15	.....	15	70	.....	70
Rennes	1,510	7	1,517	81	3	84	1,591	10	1,601
Rouen *	66	17	83	4	4	8	70	21	91
Toulouse	2,188	333	2,521	121	43	164	2,309	376	2,685
Tours *	56	3	59	10	.....	10	66	3	69
Alger	1,177	35	1,212	101	4	105	1,278	39	1,317
Total	33,235	3,818	37,053	2,315	1,741	4,056	35,550	5,559	41,109

TABLE 8.—*State universities—Distribution of students by faculties, Jan. 15, 1913.*[1]

University faculties and schools.	Men.			Women.			Total.
	French.	Foreign.	Total.	French.	Foreign.	Total.	
Law	15,516	1,128	16,644	69	50	119	16,763
Medicine	6,597	803	7,400	358	489	847	8,247
Sciences	4,817	1,239	6,056	424	159	583	6,639
Letters	3,557	600	4,157	1,209	1,032	2,241	6,398
Pharmacy	1,242	17	1,259	51	2	53	1,312
Schools of medicine:[2]							
Medicine	1,258	29	1,287	201	9	210	1,497
Pharmacy	247	3	250	3	.....	3	253
Total	33,234	3,819	37,053	2,315	1,741	4,056	41,109

[1] Bulletin administratif du ministère de l'instruction publique, Mar. 22, 1913, p. 377.
[2] Not included in the universities.

The following special schools of university rank are also under the minister of public instruction:

Collège de France (appropriation, statistics for 1912, $118,302); Museum of Natural History (appropriation, $251,858); Practical School of High Studies [École Pratique des Hautes Études (State appropriation, $75,232)]; Superior Normal School (appropriation, $55,385), reunited to the University of Paris by a ministerial decree, November

1, 1904; School of Archives [École Nationale des Chartes (appropriation, $16,500)]; School of Oriental Languages (appropriation, $35,050); French School of Archæology at Rome (appropriation, $16,000); French School at Athens (appropriation, $24,600); École Nationale des Beaux Arts (appropriation, $84,052). The remaining special schools, such as the Conservatoire des Arts et Métiers, École Nationale Supérieure des Mines, etc., are under the charge of other ministers.

SWITZERLAND.

INTRODUCTION.

Switzerland has not only given to the world great leaders of educational reform, Rousseau, Pestalozzi, and Père Girard, but it has given also striking examples of the adaptation of education to the practical needs of a people. The system of technical schools maintained by the combined action of communities and the Federal Government has been fully explained in recent reports of this office. The following statements relate to the commercial schools and schools of agriculture, which bear also an important part in maintaining, in the Republic, a high standard of industrial efficiency.

COMMERCIAL SCHOOLS.

Continuation schools, including schools for general education, trade and commercial schools, are maintained in all the Cantons of Switzerland, and are supported by local authorities, with aid from the Federal Government. The following information, received from the United States consul at St. Gall, summarizes particulars respecting the different classes of commercial schools in 1912; corresponding particulars for 1911 are given also in parentheses:

SWISS FEDERAL GRANTS TO COMMERCIAL EDUCATION FOR THE YEAR 1912.

The commercial school in Switzerland continues to gain in importance. In wide circles of the population there is a conviction that a scholastic and special training, added to general culture, is calculated to improve the prospects of advancement.

By means of grants, the Federal Government aims at raising the standard of commercial-school education, and directs its efforts toward enabling Switzerland to hold her own against the keen competition of the foreigner.

The contribution from the Federation may amount, according to circumstances, to as much as half of the sums subscribed yearly by the Cantons, districts, corporations, and private persons; these Federal contributions must, however, entail no diminution of the sums previously paid by the Cantons, districts, etc.

The total Government grants for commercial education in 1912 amounted to $212,696, an increase of $27,131 over 1911, when the amount was $185,565.

The various grades and number of schools, attendance, and Government grants received last year are as follows:

(1) *Commercial high schools*, 6 in all, located at St. Gall, Berne, Fribourg, Zurich, Neuenburg, and Lausanne; operating expenses, $55,095 (1911—$35,542); number of pupils, 397 male, 16 female, total, 413 (1911—338); school fees collected, $4,743 (1911—$3,582); Government grant, $16,055 (1911—$10,172).

(2) *Commercial schools*, 35 in all (in 1911 there were but 31); total operating expenses, $386,544 (1911—$347,373); number of pupils, 2,737 male, 1,670 female, total, 4,407 (1911—3,986); school fees collected, $60,352 (1911—$57,287); Government grant, $105,438 (1911—$93,660).

(3) *Administration schools.*—These schools, which especially prepare young men and women for the Federal post, telegraph, telephone, and customs service, received a Government grant for the first time in 1911.

There are four in all, located at St. Gall, Geneva, Biel, and Zurich; total operating expenditures, $31,474 (1911—$29,815); number of pupils, 329 male, 5 female, total, 334 (in 1911 there were 360 pupils, all male); school fees collected, $1,533 (1911—$1,558); Government grant, $9,978 (1911—$9,346).

(4) *Mercantile secondary schools.*—To this class of institutions belong (*a*) 80 schools of the "Swiss Commercial Union," the chief aim of which is the education of young tradesmen; the total operating expenses of this class of schools amounted in 1912 to $159,986 (1911—$140,728); pupils, male 8,719, female 2,549, total, 11,268 (1911—10,966); school fees collected, $34,964 (1911—$31,235); Government grants, $58,501 (1911—$53,387); grants from Cantons, $28,216 (1911—$24,188); from districts, $21,356 (1911—$19,416); from corporations, $11,891 (1911—$11,413); and (*b*) 40 other single associations and district secondary schools; total operating expenditures, $26,534 (1911—$23,702); number of pupils, male 2,899, female 2,150, total, 5,049 (1911—4,613); school fees collected, $5,334 (1911—$5,426); grants from Government, $8,895 (1911—$8,115); from Cantons, $5,397 (1911—$5,085); from districts, $4,187 (1911—$3,491); from corporations, $1,856 (1911—$1,008).

For miscellaneous purposes there was expended $13,829 (1911—$10,885), among which was $5,223 (1911—$4,689) for scholarships; $2,299 (1911—$2,064) for apprenticeship examinations; $2,738 (1911—$1,786) for libraries and lectures.[1]

AGRICULTURAL INTERESTS.

The agricultural interests of Switzerland are as carefully promoted as those of trade and industry, and in several Cantons full provision is made for agricultural education. The following information pertaining to this interest is derived from a recent consular report on the subject:[2]

STATISTICS OF AGRICULTURE.

The total area of land in Switzerland utilized for agricultural purposes is 5,160,380 acres, divided into 3,479,207 parcels of land. There are 252,496 farms, on which are employed 763,915 hands, of whom 21,596 are foreigners, 9,862 being Italians, 5,507 Germans, 5,101 French, 854 Austrians, and the balance of other nationalities.

Of the total Swiss population of 3,753,293, no less than 413 in every 1,000 are engaged in agriculture, while 387 are employed in the metal, textile, and chemical industries, 118 in commerce, 47 in transportation, 17 in forestry, and 18 in the various other occupations. Switzerland must therefore still be ranked as an agricultural country.

The foreign element appears to have settled in the frontier Cantons almost exclusively. In the Canton of Geneva, adjoining France, for instance, statistics show that foreign farm hands, mostly French, constitute 38 per cent of agricultural laborers, while in some of the interior Cantons the foreign percentage is negligible.

Only 2.6 per cent of Swiss farms use motor power, the entire horsepower being 23,640.

[1] Statement forwarded by Mr. Eugene Nabel, vice consul in charge, St. Gall, Switzerland, Mar. 17, 1913.

[2] Statement forwarded by D. I. Murphy, United States consul at St. Gall, December, 1912.

The Canton of St. Gall, with a population of about 303,000 and a total area of 769 square miles, has 17,027 separate farms, covering 325,730 acres, the average size of holdings being a trifle over 19 acres. But only 20,255 acres, however, can be said to be under any kind of cultivation, 6,257 acres being devoted to growing wheat, rye, barley, etc.; 1,139 acres are in vineyards and 410 acres in truck gardens; 34,199 acres in the Canton are forests, probably the finest in the world, and there are great areas of meadow land and pasturages. Climatic conditions and the peculiar nature of the soil are decidedly unfavorable to truck gardening, hence vegetables of all kinds have to be brought in from the outside, which fact is an important item in the high cost of living.

Conditions are not as good in the adjoining Canton of Appenzell, the proportion of land suitable for any kind of farming being much less than in St. Gall.

AGRICULTURAL SCHOOLS.

According to the report from which the foregoing statement is cited there are in eastern Switzerland, the German-speaking section of the Federation, nine agricultural schools under the supervision of the several cantonal governments. During the last year (1912) 1,012 pupils were enrolled in these institutions, which impart a thorough and practical knowledge of scientific farming. Three of these schools, with 251 pupils, are located in the consular district of the writer, the most important one being at Rheineck, Canton of St. Gall. It is in charge of a director, with three principal teachers and 11 assistants, the pupils lodging and boarding in the establishment. There are two school terms per year, the winter term extending from November 1 to March 31, with 35 hours' instruction per week, and the summer term the balance of the year, broken only by the usual vacations.

The school offers general courses of instruction, including German, mathematics, surveying, planimetry, drawing, botany, zoology, physics, chemistry, geography of the Alps, and the constitution of Switzerland.

The agricultural course is comprehensive. It includes, besides the sciences pertaining to agriculture and kindred industries, practical courses in farming, care of cattle, fruit growing, fertilizing processes, bee culture, building, bookkeeping, and the elementary principles of law relating to the sale of lands, transportation of products, etc.

The summer season is largely devoted to visiting and inspecting large farms and dairies, with frequent descriptive lectures on appropriate subjects. The school possesses an extensive analytical laboratory and an excellent library, and the students are frequently called upon by farmers and dairy owners throughout the surrounding country to advise regarding improvement of the soil, the planting and rotation of crops, the installation of machinery, etc., charges for such services ranging from $2 to $3 per day.

The schools in Thurgau and Graubuenden are managed on lines almost identical with the one at Rheineck. The directors of the Thurgau establishment recently discussed the question of admitting women to the school, several women applicants having requested permission to follow the courses, especially those in fruit growing, vegetable gardening, and bee culture. The decision, however, was adverse to the admission of women.

Agricultural schools are also in successful operation in other Cantons, i. e., in Berne, with 275 pupils; in Zurich, with 181; Aargau, 114; Lucerne, 112; Solothurn, 47; and Schaffhausen, 32.

CHAPTER XXXVI.

GERMANY.

CONTENTS.—Progress in the common schools; increase in the number of teachers; old methods versus new systems.—Continuation schools.—Current educational interests.—Religious and moral instruction.—Secondary schools.—The "Einheitschule."—Secondary education for girls.—Obstacles in the way of women students.—The universities.—The technical high schools.—Teachers' associations.

PROGRESS IN THE COMMON SCHOOLS.

According to an agreement of the heads of the statistical bureaus of the several German States, uniform statistics concerning the common schools (Volksschulen) in the Empire have been compiled every five years since 1901. The latest compilation, published in 1912, brings the statistics for 1911 into comparison with those for 1901 and 1906.[1]

From a summary of the detailed statistics it appears that the common schools of Germany were attended by over 10,000,000 pupils in 1911. The growth of primary education in the Empire in the first decade of the twentieth century can be seen from the following comparison:

Public common schools (Volksschulen).

Year.	Schools.	Teachers.		Pupils.
		Male.	Female.	
1901	59,187	124,027	22,513	8,924,779
1906	60,584	137,213	29,384	9,737,262
1911	61,557	148,217	39,268	10,309,949

The Volksschulen correspond closely to the rural and the elementary city schools of the United States. In the country they are very generally one-class schools in which boys and girls of all ages at which they must attend school are instructed together by the same teacher. In the different conditions of town life it has been found necessary to establish graded schools of different types and with more extended programs; so that besides the common school there are higher public schools which are variously named, as middle schools (Mittelschulen),

[1] Vierteljahrshefte zur statistik des Deutchen Reichs: Kaiserlichen statistischen Amte, 1912. Viertes heft, pp. 203–231; 22 Jahrgang, 1913, Zweites heft, p. 188 et seq.

higher elementary schools, citizens schools, etc. They include the classes of an ordinary public school with two or three additional classes, making altogether a course of eight or nine years, in which one or more languages and elementary science are taught. The total enrollment in the public schools of this class in 1911 was 273,394, which, added to the enrollment in the Volksschulen, makes a grand total of 10,583,343 pupils. There were also 80,660 pupils in private schools of the intermediate order.

The expenditures for the Volksschulen for the years included in the comparison were as follows:

Expenditures of the Volksschulen.

Year.	Expenditure.	
	Marks.	United States equivalent.
1901	421,317,000	$100,273,446
1906	522,861,000	124,440,918
1911	669,837,000	159,421,206

In some cases the expenditure for Mittelschulen is included in the total for Volksschulen. The amount reported separately for the former schools is 30,566,591 marks, equivalent to $7,274,849. This would raise the total expenditure for the public schools in 1911 to $166,696,055.

Prussia, with a population of 40,165,219, or 61 per cent of the total for the Empire (census of 1910), enrolls in its Volksschulen 6,572,140 pupils—that is, 63.7 per cent of the total enrollment; it employs 116,239 teachers, or 62 per cent of the total teaching force (187,485); and in 1911 expended for these schools 420,898,120 marks, or 62.8 per cent of the amount reported for the Empire. In respect to Mittelschulen the proportions for Prussia are still higher, namely, for pupils, 66 per cent of the total; for teachers, 75 per cent; and for expenditures, 84 per cent.

The predominance of one-class schools is indicated by the fact that of 38,684 Volksschulen in Prussia 20,198 were of the type named.

From the comparative statistics it appears that the enrollment in the Volksschulen has increased in the decade 15.8 per cent. This is little more than the increase in population, which, as shown by the censuses of 1900 and 1910, was 15 per cent. But in the decade covered by the school statistics the expenditure for the common schools increased by 59 per cent. This large advance was caused chiefly by improvements in the salaries of teachers, new buildings, and welfare services.

INCREASE IN THE NUMBER OF TEACHERS.

As regards teachers, two significant facts are brought out by the comparative statistics—the increase is relatively greater for women teachers than for men, while the number of teachers of both sexes has increased more rapidly than that of the pupils. In the year 1901 there were 60.9 pupils to each teacher in the public common schools of Germany; in 1906, 58.4; and in 1911, 54.9. Although this shows a steady improvement, 54.9 pupils to one teacher is still considered excessive. In the larger States the number of pupils to each teacher was, in 1911, as follows: Prussia, 56.5; Bavaria, 56.7; Wurttemberg, 57.8; and in the Kingdom of Saxony, 54.7.

The averages above given conceal many extreme cases. It is admitted that the overcrowding of schools is everywhere encountered. The National Liberal Party in Prussia urged the budget committee of the Lower House to include in the estimates for public instruction for 1912 an appropriation sufficient to provide for the reduction of classes in the primary schools. It was estimated that upon a total of 6,500,000 pupils there were 1,219,000 in 7,396 overcrowded classes. This number comprised many classes having above 70 pupils; one case was cited of a single master charged with the instruction of 230 pupils; several hundred schools, it was stated, had classes of 120 pupils.

On the part of the Government it was declared that during the last 11 years the number of all congested classes had been greatly reduced; nevertheless, the recommendation of the committee was adopted by the House.

OLD METHODS VERSUS NEW SYSTEMS.

The overcrowding of schools illustrates, in a way, the method of German teaching. All the teachers are trained in a thorough system, and they handle their classes in a masterly manner, but with small regard to the individual. Notwithstanding the fact that modern psychology and the newer philosophies of education are most indebted to German thought and research, they have not yet greatly modified the methods of dealing with the young in that country. Even the unrest in German educational circles arises rather from discontent with social and economic conditions than from reaction against the established routine of the schools.

It should be recalled, however, that two important experiments in the classification of elementary schools had their origin in Germany. The "Hilfsschule," or auxiliary school for defective children, an experiment which was begun at Halle in 1859, has not only been adopted in Germany, but has spread to other continental countries, to Great Britain, and to the United States.

A second experiment, the "Mannheim system," so called from the city in Baden in which it originated, while not extensively adopted has undoubtedly helped to bring about more flexible classification in elementary schools generally. Of this system a well-known American educator who has recently made personal investigation of its working writes:

> The Mannheim system consists of dividing up the children in the common schools (Volksschule) into three groups of children. The highest group comprise the normally capable children. The second, or middle group, are those who have fallen behind for various reasons and are a little subnormal for lack of ability, sickness, etc. The third group are the defectives. At about the end of the third year, or third grade, the children are divided up into these three classes, and a separate course of study is worked out suitable to the abilities of each grade, and each one rounded out to a complete course. The normal class, or more capable children, will be able to move on more rapidly, unobstructed by laggards and dull pupils. The middle class of children, being of about equal ability, are moved on more slowly and do their work more thoroughly and satisfactorily. The third class requires special skill and ability in the teachers and a method and subject matter suitable to their peculiarities or weaker powers. This appears to me as a very important effort to solve some serious problems in the organization of schools, and is a method of teaching better adapted to children's different abilities.[1]

CONTINUATION SCHOOLS.

The deepest movement pertaining to elementary education in Germany relates to vocational training. While this movement has been brought about by the irresistible force of competitive industry, it has given rise to a new conception of popular education as a means of awakening the social and civic consciousness, an idea expounded by Director Kerchensteiner, of Munich, and partially realized in that city. Although this conception, as a whole, has been opposed by the authorities in Prussia and other German States, it has attracted wide attention and promises to work great changes in the prevailing theories of elementary education. Without entering into this subject, which has been quite fully considered in previous reports and bulletins of this office,[2] attention is here called to the recent progress and present status of the continuation schools.

Compulsory measures.—The tendency to make attendance upon continuation schools compulsory is rapidly spreading in the States of the German Empire. In Bavaria, Baden, Wurttemberg, and Saxony attendance is compulsory for boys for a certain number of hours a week; in Prussia, towns are authorized to make such attendance compulsory, by local by-law, for all young people engaged in

[1] From a letter to the Commissioner of Education by Supt. Charles A. McMurry, of De Kalb, Ill.

[2] See the Prussian system of vocational schools. Rep. of Commis. of Ed., 1910, V. I, ch. 7. German industrial education and its lessons for the United States, by Holmes Beckwith. Bull., 1913, No. 19. A comparison of public education in Germany and the United States, by George Kerschensteiner. Bull., 1913, No. 24. Consular reports on industrial education in Germany. Bull., 1913, No. 54.

industrial and commercial occupations. Most of the large towns in Prussia avail themselves of this authority. The current year is marked by the passage of a law (May 19) extending this power to local authorities in the smaller towns and rural districts in the following provinces: Brandenburg, Pomerania, Saxony, Schleswig-Holstein, Westphalia, the Rhine Province, and Hohenzollern.

In accordance with this law—

all boys under 18 in employment may be required to attend a continuation school during three consecutive winters; the time for the instruction and other details are to be settled by the local authority, but no classes are to be held, as a rule, on Sundays.

During the current year, also, attendance upon industrial continuation schools has been made compulsory in the free city of Hamburg. This law is the outcome of an agitation that has been prolonged for several years, the discussion turning chiefly upon the proposition in the Lower House to extend the compulsion to girls, and to youths entitled to serve only one year in the army, while the Senate wished to exclude both these classes. The law as passed represents conclusions reached as a result of the largest experience in the Empire; the text of the bill, which is given below, is, therefore, highly suggestive.

(1) Attendance at a continuation school is compulsory upon all male persons under 18 years of age in the town of Hamburg and in Great and Little Bradenau who have left school and are in employment. The compulsion extends, as a rule, to times of temporary unemployment, and lasts for three years after leaving the elementary school, but not beyond the end of the school year in which the age of 17 is reached.

(2) The following are exempted from attendance: (*a*) Those who can give proof of having reached the standard aimed at in the continuation school; (*b*) those attending some other continuation or trade school; (*c*) those who have passed the examination exempting them from more than one year of military service.

(3) A special committee for the management of trade and continuation schools is to be formed, consisting of representatives of the senate and of the house of burgesses, as well as representatives of the chambers of trade and commerce, and of the various educational authorities.

(4) The instruction is to be arranged with a view to training the boys for a trade. The number of hours per week is to be eight for those trades requiring drawing, and six for other trades, and all classes are to be held on week days and before 8 p. m., at latest. Details as to times and subjects are to be settled after consultation with all the authorities concerned.

(5) Employers of labor are required to notify to the continuation school authority the names of all their employees of compulsory school age six days after engaging them, at the latest, and to give information when they leave their employment.

(6) Employers of labor, as well as parents and guardians, are under obligation to see that the young people attend school and that they do so regularly.

(7) Employers of labor, parents and guardians, and also children of school age who do not comply with the provisions of the law, are liable to a fine of 60 marks, or in cases of inability to pay, 14 days' imprisonment.

(8) A fee of 6 marks is to be paid for each scholar every half year, by the employer with whom the boy is working, on June 15 and December 15, respectively. If out of employment on these dates, the next employer is required to pay the fee, which may, in all cases, be recovered from the employee.[1]

Statistics.—At the close of 1911 Germany possessed about 3,300 industrial continuation schools, of which nearly 3,000 were under obligatory ordinance. The number of pupils was approximately 550,000. The commercial continuation schools not included in the foregoing totals numbered at the same time 700, of which only 80 were not under obligatory regulations. The number of pupils in the commercial schools was, in round numbers, 102,000; 90,000 boys and 12,000 girls.

Agricultural continuation schools are very numerous in Prussia, Bavaria, and Alsace-Lorraine. For all Germany the number was 1,700 obligatory and 3,500 optional. They comprise altogether about 84,000 pupils.

In addition to the continuation schools having a vocational purpose, there were in Germany at the close of 1911, 16,000 continuation schools for general instruction, attended by 350,000 boys and 250,000 girls.

The foregoing statistics do not include the continuation schools of an industrial character for young women; since, as a rule, these have not been brought under obligatory orders, it is difficult to secure exact statistics relating to them. The reports indicate, however, that great interest is taken in the domestic training of young women in the Grand Duchy of Baden and in Alsace-Lorraine.[2]

As a general rule, the continuation schools are supported by the communes, with the aid of chambers of commerce, commercial societies, trade unions, etc. The annual expenditure for the schools of this order is estimated at 22,000,000 marks ($5,236,000); of this total the communes supply 10,500,000 marks, the State 6,500,000, and employers and pupils in the way of fees 4,500,000. The balance is met by voluntary subscriptions. The communes also furnish housing, light, heat, etc., for the schools.

CURRENT EDUCATIONAL INTERESTS.

In his letter already referred to, Dr. McMurry sums up the current educational interests in Germany as follows:

Nearly all the important problems that we are struggling with in American schools are under lively, and almost too lively, discussion in Germany, only from the standpoint peculiar to German conditions; for example, vocational training, education of women, coeducation, experimental psychology, the common school as a basis for all schools leading to higher instruction, such as colleges, universities, and technical schools, moral and religious education, place and function of the fine arts, and uni-

[1] Cited from the Times (London) educational supplement, Nov. 4, 1913, p. 171.
[2] See Kommunales Jahrbuch, 1912–13, article Fortbildungsschule.

versity education. I was atonished at the vigor and incisiveness of the discussion on all these points. I think it is also correct to say that in nearly all these respects they are tending very rapidly toward some of the results which we have already reached in America; for example, coeducation, the overthrow of the old classics monopoly in education, introduction of construction and manual training in the schools, etc. Religious education is also being very vigorously discussed.

From the current literature of education one gets a very strong impression that German writers on the subject are nearly always men of large and rich experience in practical educational work, and that they possess a sort of philosophical balance which prevents them from extreme radicalness or onesidedness.

RELIGIOUS AND MORAL INSTRUCTION.

The following statement shows the present status of religious and moral instruction in the elementary schools of Germany, with special reference to the city of Coburg, which is regarded as typical:

In every Protestant school religious and moral instruction is given, and the Bible stories used are so written that great opportunity is given the teacher to include both. In the schools in Coburg [1] and throughout the entire Empire, a participation by the scholars in religious and moral instruction is compulsory. Children of Catholic or Jewish parentage are, however, excepted, but must receive special religious and moral instruction from a Catholic priest or a Jewish rabbi in lieu of that given in the schools.

The real religious instruction begins with the third school year, there being three or four lessons of an hour in length each week. In the Coburg schools three lessons are given. Only fairy tales, ending with a moral, are told in the first two school years two hours each week. This, in America, I think would be called moral instruction. The following description of one of these lessons gives a fair idea of how the children are instructed: The teacher first relates a Bible story in divisions, each of which is repeated by the children. The whole story is then read and the contents are brought to the understanding of the children by means of questions and explanations. Bible sayings, religious songs, and pieces taken from the catechism finish the lesson if time allows. Usually in the first and second school years, and sometimes in the third year as well, no books are used. In the third to the fifth years a book containing Bible stories is used, while in the sixth to the eighth school years either the Bible or—as is the case in most States—a so-called Bible Reading Book is used, containing extracts provided especially for school purposes, in which the parts not understood by children are left out. The "whole" Bible has not been in use in Coburg for over 10 years. The New Testament is also used in religious instruction. For the schools in the city of Coburg there is another special Biblical reading book in use, edited by the Coburg director of schools already mentioned, called "Reading Book from the Old and New Testament" (Lesebuch aus dem Alten und Neuen Testament), which is better adapted to the needs of school children. It contains a selected text with Biblical sayings, songs taken from the hymnal, and repetition questions at intervals. Large Biblical pictures, which are hung on the walls of the schoolrooms, are in general use in Germany, and have already met with much favor and ready sale in all the civilized countries of Europe. Several hundred of these pictures have been sent to the United States, but have evidently not yet come into public notice, for the sales are still very small.[2]

[1] For detailed information relative to religious instruction, see "Preliminary Questions for the Reform of the Religious Instruction in the Public Schools" (Vorfragon zur Reform des Religionsunterrichts in der Volksschule), and "Didactic of the Evangelical Religious Instruction in the Public School" (Didaktik des Evangelischen Religionsunterrichts in der Volksschule), edited by the director of schools, Coburg.

[2] Statement by Mr. Frank Dillingham, consul general, Coburg, Germany.

SECONDARY SCHOOLS.

CLASSIFICATION.

The old gymnasium, with its traditions extending over centuries, was until a few decades ago the only preparatory school for the universities. It is characterized now, as then, by its extreme adherence to the study of the dead languages; and a large proportion of the full secondary schools, however termed, are still arranged according to the traditional plan.

The progymnasia, often called Latin schools in South Germany, are schools without the three upper classes, and chiefly devoted to the study of Latin and Greek.

The salient fact in German secondary education is the rise of the reform schools. To quote a recent authority on this subject:

> Since German educational methods were last exhibited in America (St. Louis, 1904), reform schools have made great strides in Germany. In the United States this term conveys a totally different meaning. In Germany it represents schools of a classic, or a modern, tendency which first instruct all their pupils alike through several classes, and then on this common foundation continue the instruction either in the classical method of the gymnasium, or in giving greater attention to the modern languages, mathematics, and the natural sciences.
>
> Since Director Schlee, of Altona, created this common basis for the Realgymnasium (a high school of nine classes, with Latin, French, and English, but no Greek) and the Realschule (a high school of six classes, without the three upper ones, and which cultivates modern languages only), a great deal has been written for and against this principle. Extended practical trials of it were not made until 1890; in 1898 this reform plan was working at 30 German high schools, two systems being distinguished—that of Altona and that of Frankfort.
>
> In both these systems the teaching of French began in Sexta (elementary class, pupils averaging 10 years old); but the first added English in the third and Latin in the fourth school year, while the Frankfort system, chiefly advocated by Privy Councillor Reinhardt, director of the Goethe Gymnasium at Frankfort on the Main, allows of only one foreign language (French) in the three years' course of common instruction, followed in the fourth year by thorough instruction in Latin; and not until the sixth school year (when the pupils are about 15 or 16) is English added on the modern side (Reform-Realgymnasium) and Greek on the classical side (Reform-Gymnasium).
>
> After six years' attendance at one of the realschulen with satisfactory results, the pupil receives a certificate entitling him to serve for one year in the army, instead of two. The realschule with six classes, which teaches French and English, but no dead languages, dismisses its pupils with this certificate.
>
> As the founder of the Berlin realschulen (modern schools) desired to give an opportunity to clever boys leaving the upper classes of the elementary schools (mostly at 12 years of age) to enter a high school without difficulty and take advantage of its educational privileges, the authorities have created a number of realschulen (now 13) in the curriculum of which no foreign langugage is taught in the first two classes. This is contrary to the general Government plan for all realschulen outside Berlin, and is meant to facilitate the transfer of pupils from the elementary into the higher schools. In the four upper classes French is taught very thoroughly, while English has on the whole not sufficient time devoted to it. There is no opportunity for the mixed education of boys and girls in schools of this type.

EINHEITSCHULE.

Reference may here be made to the system of the "Einheitschule," which involves both elementary and secondary education. This system provides for a single school common to all the children of the locality, to take the place of the several kinds of elementary schools during the first six years of instruction, i. e., ages 6 to 12. The separation of pupils according to the different schools in which they will continue their education takes place at 12 years of age, some passing over into the gymnasia, others into the realgymnasia, realschulen, or the higher city schools. The einheitschule has been tried in Hamburg and some other cities, and is vigorously advocated by many authorities, among them Prof. Rein, of Jena, as a means of lessening overpressure on the pupils, of promoting sounder principles of teaching, and of correcting the evils of extreme social distinctions.

SECONDARY EDUCATION FOR GIRLS.

In Baden girls are admitted to the gymnasia, but in the other German States they receive secondary education in the intermediate schools or in the higher schools for girls, which are either private or municipal institutions. In the secondary course for girls prominence is given to modern languages, and the instruction is carried to a point which enables pupils to enter the teachers' seminaries that are often connected with these establishments. In these the students acquire both the theory and art of teaching, the latter by means of the "practice schools" (Übungsschulen) connected with the seminaries. A typical example of this class of schools is found in the Royal Augustaschule at Berlin. The seminary of this school grants a certificate qualifying for the post of teacher at the higher and intermediate grade girls' schools, and offers the pupils the chance of taking courses in the classical languages required for entrance to the universities. The first gymnasium for girls giving a certificate qualifying for the university was founded in Carlsruhe in 1893; almost at the same time Helene Lange opened a gymnasium course for girls in Berlin, and this was followed by a gymnasium course established in Leipzig by Fraulein Dr. Windscheid.

OBSTACLES IN THE WAY OF WOMEN STUDENTS.

It is worthy of note that young men intending to qualify for professorships in secondary schools receive their preparation at the universities. In connection also with the secondary schools themselves seminary courses have been introduced which are intended to give the younger teachers, who are just beginning their professional careers, the opportunity of obtaining special pedagogic training. This is afforded by means of conferences held under the presidency of

the director and by lectures given by capable higher-grade teachers. The student teacher also prepares essays upon questions of education and methods.

The exclusion of girls from the Gymnasia, and the consequent obstacles in the way of their preparation for the universities where these are open to women, and the distinction between the training of young men and young women aspiring alike to be teachers of secondary schools, are fruitful causes of discontent on the part of women teachers and the subject of constant discussion in the associations of women.

Statistics of secondary schools, 1911.

[The numbers in parentheses refer to private schools.]

Class.	Number of schools.	Number of teachers.	Number of students.	Expenditures.	
				Marks.	United States currency.
Schools having nine-year course:					
Gymnasia	524 (8)	9,769 (157)	160,237 (2,451)	69,557,135	$16,554,596
Realgymnasia	223 (3)	3,708 (31)	70,357 (304)	22,613,048	5,381,905
Oberrealschulen	167 (4)	3,473 (33)	75,832 (150)	20,091,898	4,781,872
Schools having six-year course:					
Progymnasia	81 (7)	570 (36)	9,509 (1,075)	2,776,372	660,776
Prorealgymnasia	63 (1)	384 (3)	7,252 (32)	2,006,559	477,561
Realschulen, höhere Bürgerschulen, etc.	629 (103)	5,037 (903)	104,457 (14,989)	22,597,854	3,378,289
Vorschulen (preparatory schools for boys)	413 (13)	1,239 (33)	49,690 (466)	670,739	159,636
Secondary schools for girls:					
Gymnasia	39 (5)	1,039 (64)	22,137 (1,399)	5,242,869	1,247,803
Higher schools	789 (368)	11,359 (4,535)	212,324 (78,280)	28,691,312	6,828,532

THE UNIVERSITIES.

STATISTICS.

The 21 universities of the German Empire had a total attendance of 60,346 students in the summer semester of 1913. This total includes 4,841 foreign students, of whom 4,310 came from other European countries, 287 from America, 196 from Asia, 45 from Africa, and 3 from Australia. The University of Berlin led, with 8,383 students. Munich followed, with 6,655; Leipzig had 5,171; Bonn, 4,460; Freiburg, 3,163. The number of students at the remaining universities range from 1,005 at Rostock to 2,790 at Breslau. Berlin naturally attracted the greatest number of foreigners, viz, 1,393—nearly one-third of the total number.

One of the most noteworthy events in the development of university life in Germany relates to the admission of women students, and the increasing numbers of women availing themselves of this

privilege is attracting great attention and has given the text for current discussions of social and economic problems. The total number of women students reported in the summer semester of 1913 was 3,400, which, it will be seen, is a little more than 5 per cent of the total student body. In 1908 only 320 women students were registered, hence the number has increased tenfold. The faculty of philosophy attracted 2,502 women, and medicine followed with 804. The faculty of law reported only 82, and the faculty of theology 12. It is of further interest to note that the University of Berlin registered 770 women, or nearly one-fourth of the total.

The annual expenditure for the universities amounts in round numbers to about 37,000,000 marks, equivalent to $8,806,000. In 1912 the expenditure for the University of Berlin was 4,738,061 marks ($1,127,659). Of this amount, 3,931,169 marks, about 83 per cent, was derived from State funds. In general, State subsidies provide the larger proportion of the incomes of the several universities.

EXPANSION OF THE PHILOSOPHICAL FACULTY.

The development of science teaching in the German universities during the last two decades and its effects upon the industrial development of the Empire have attracted so much attention that movements in other faculties have been somewhat obscured. Special interest, however, attaches to the expansion of the philosophical faculty, which is not only a matter of importance in itself, but which has stimulated in great measure the scientific expansion.

In its original form the philosophical faculty was intended to prepare students for entrance to the professional faculties, but at present its courses of instruction comprise the entire field of science, extending far beyond the range of a specialized profession. The faculty now affords professional training for the teachers of secondary schools and the scientific instruction which is essential to the newer technical professions, such as chemistry, agriculture, forestry, and more recently political economy and science. In this faculty, also, medical students receive their training in natural science. On account of this extension, the philosophical faculty often requires the service of more professors than all the other faculties together. At some universities the faculty has been divided into two branches, the historical-philosophical and the mathematical-natural science. At other universities two sections have been formed having certain points in common. At Tubingen a special political science faculty has developed, and a similar faculty at Munich.

This expansion of the philosophical faculty has important bearings upon education, considered both as a science and as an art. Several of the universities have one or more professors of pedagogics in the philosophical faculty, but according to Dr. Wilhelm Münch the sub-

ject has been usually regarded "only as a sort of minor division in the department of psychology, although several other sciences, like ethics, political science, and the history of civilization, trench on that subject just as much." The statement quoted was made in 1911, at which time Dr. Münch was holding the chair of pedagogy in the University of Berlin. The fame of his teaching attracted many students, and gave an impulse to the subject in that university which led to plans for organizing a special seminary in its interest. Although Prof. Münch has since died, these plans have not been abandoned. At the same time a pedagogical seminary on a large scale was projected for Halle University, and thus these two universities, it was expected, would be placed upon the same plane as Jena and Leipzig, long celebrated for their pedagogical seminaries.

At Jena education is treated in a very comprehensive manner, including pedagogical principles and methods, and their relations to philosophy and ethics, but with strong emphasis on the Herbartian theory. The prospectus of the University of Berlin announced for the summer of 1912 a course in the history of pedagogics by Dr. Benno Erdmann, who is well known for his exposition of philosophy and experimental psychology. The University of Halle in its announcement for the winter session ending March 15, 1913, comprises a pedagogical seminar including one course of lectures on the history of pedagogics by Prof. Dr. Fries, who is well known also for his critical exposition of philosophical systems.

The intimate union of philosophy and pedagogics in university instruction accords with their fundamental relations; from age to age philosophy has determined the prevailing doctrines and processes of education. The latest successor of Kant in the University of Konigsberg, Narciss Ach, in his "Seminar of Pedagogy," expounds the modern philosophies, including Kant, whose "Critique of Pure Reason" and "Categorical Imperative" changed for a generation the treatment of logic and ethics in the higher schools.

The special seminars of pedagogics, which are among the latest adjuncts of the German universities, afford the opportunity for emphasizing the relations of philosophy and psychology to the science and art of education and illustrate also the increasing recognition of teaching as a liberal profession.

THE TECHNICAL HIGH SCHOOLS.

The scientific expansion of the universities, to which reference has already been made, is reflected in the increasing activity of the scientific academies which maintain close relations with the universities. The academies themselves preceded the great university movement, the Royal Academy of Science in Berlin, dating from 1700, the very dawn of the eighteenth century, which was distinguished by this form

of organization in the chief nations. The scientific museums are a direct outcome of the development of scientific teaching, and this entire movement reaches its climax in the organization of technical high schools, which have the prestige of universities.

The following table shows the attendance and the expenditure (in round numbers) of the 11 schools of this type in 1912–13:

Statistics of technical high schools, 1912–13.

Location.	Number of students, winter semester.	Expenditure.	
		Marks.	United States currency.
Aachen	1,002	811,421	$193,118
Berlin	2,851	2,125,864	505,956
Brunswick	665	278,583	86,304
Breslau	290	2,165,246	515,328
Danzig	1,392	680,265	161,903
Darmstadt	1,668	771,300	183,569
Dresden	1,549	1,671,534	397,825
Hannover	1,784	817,446	194,552
Karlsruhe	1,261	505,232	120,245
Munich	2,766	928,654	221,020
Stuttgart	1,190	575,021	136,855
Total	16,418	11,330,566	2,716,675

TEACHERS' ASSOCIATIONS.[1]

Teaching is a profession in Germany in a sense in which it is not in the United States, and the activities of German teachers' organizations are of definitely professional character. In the main these activities center about two aims: Betterment of professional status on the one hand, as represented in higher salaries, improved working conditions, and more liberal pension provisions; and educational advancement on the other. In respect to the first of these two aims, the German teachers' associations partake of the function of guilds or labor unions—they represent the organized effort of the teachers as a class to better their position. In their educational aims the German associations are more comparable to the organizations of teachers in the United States. In both lines of activity the German teachers' societies demonstrate the effectiveness of group association for a common definite end; the least that can be said of them, from the general association itself down to the innumerable local and special branches, is that they are highly efficient for the purposes for which they exist.

The economic program is none the less effective because frankly avowed. Occasionally it appears to be the dominant interest. Thus the secretary of the general association of women teachers (Allgemeiner Deutscher Lehrerinnenverein), in a report covering the work of the association for the two-year period 1911–1913, lays special

[1] Statement furnished by W. Carson Ryan, jr.

stress on the work of the organization for salary increases. No less than 46 main branches of this association have been waging an active campaign for better salaries during the past two years. Most of them, in view of the rapidly rising rents in German cities, have been agitating for an increase in the "house money" which the German city teacher regularly receives in lieu of residence. Although in Berlin, Brandenburg, Dusseldorf, Elbing, Magdeburg, and Naumburg the agitation was without results, varying success in receiving additional house money is reported from Elberfeld (40 per cent increase); Harburg (an increase from 140 marks to 200 marks for one group of teachers and a concession of 70 marks annually to another group); Osnabruck, Neukoln, and in Silesia and Posen. In Saxony and Lubeck the special teachers obtained official recognition of certain of their demands for tenure of office and salary increase; in Mecklenburg higher pay was secured in the larger cities; Hamburg raised the entrance salary of teachers 150 marks and increased the maximum by 500 marks.

It is not to be understood, however, that the educational aim is allowed to be subordinated to the more tangible work of salary agitation. All the teachers' associations, general, State, provincial, or local, have vigorous educational programs. The Deutscher Lehrerverein, which is the central organization of teachers, corresponding roughly to the National Education Association in the United States, has a Pädagogische Zentrale, which acts as a sort of special executive council on the science of education, publishes a valuable yearbook, and in a variety of ways influences and directs current educational thought in Germany. The 1912 yearbook of the Pädagogische Zentrale discussed the principle of the Arbeitsschule as applied to science instruction. The 1913 volume carried on the same topic under the title "Reform efforts in geography and history teaching," and also discussed to some extent the development of pedagogy as a science. A summary of the papers in this yearbook will give some idea of what German teachers are currently thinking about:

In I, Richard Seyfert discusses the teaching of the home locality as exemplifying directness in instruction; Albert Müller sums up the current efforts at reform in geography teaching; G. Kalb tells how knowledge of local geography may be acquired by school walking trips; Richard Reisig shows the possibilities in linking up geography with drawing; M. Greubel argues for adequate modeling as a supplement to drawing in illustrating geography; Alfred Frenzel goes into details of instruction, using the River Elbe as a topic; Hans Stübler discusses geography instruction as a part of the industrial work; R. Kabisch takes up the reform movement in history; A. C. Scheiblhuber reviews the relation of imaginative writing to the acquirement of history; A. Tecklenburg relates history to the conditions of the home locality; G. Klemm considers history teaching of the work school type as a means of developing the concept of civilization and community life; Wilhelm Schremmer discusses the use of sources.

In II, Aloys Fischer takes up the significance of the experiment in pedagogical research and the idea of an exact pedagogy; G. Deuchler considers the needs of scientific pedagogy in the universities; and R. Seyfert writes of psychology and pedagogy in the seminar. Short descriptions are also given of the Leipzig Institute for Experimental Pedagogy and Psychology; the Munich Pedagogical-Psychological Institutes and the scientific lectures of the Berlin Teachers' Association.

At the general meeting of the German Teachers' Association, which will take place June 1–4, 1914, at Kiel, the topics to be discussed are: The question of the uniform public school (Die Nationale Einheitsschule); the attitude of the German Teachers' Association toward pedagogy as a science; and the fundamental question, Is the school in danger of departing from its real function? The latter question, judging from a preliminary discussion of the points at issue by C. L. A. Pretzel, president of the association, will bring out the opinions of teachers on a problem that affects education everywhere—just where the line ought to be drawn between what the schools should do and should not do. That German teachers and their leaders realize the attractiveness of a combined study and pleasure trip may be seen from the fact that the June meeting will take place while the German Navy is going through its spring maneuvers, and as a special inducement the teachers are invited to visit, "in the company of expert guides," every vessel of the fleet, including the imperial yacht.

Professional education is made as much of in the local groups as in the central organizations. The Berlin teachers' association planned and carried out a vacation course of lectures at the University of Berlin, inviting teachers from all over Germany to participate. Courses were given in the following subjects: Philosophy, psychology, theology, history, astronomy, zoology, music, and laboratory work in psychology and pedagogy, and microscopy of plants and animals. The significant point in this is not that the courses were given, but that the teachers' association directed the enterprise.

In their educational meetings the German associations regularly follow the plan of setting aside one or two topics for discussion, assigning one speaker to lead off with an outline of the problem and a statement of his interpretation of it, and then opening the meeting to representatives of different opinions and different localities. In this way attention is concentrated on one or two topics; and the fact that the listeners are to render a definite decision at the close of the meeting in the form of adopting or rejecting proposals adds decided zest to the arguments. As an instance, at the Prussian "Lehrertag," December 29, 1913, one of the really burning educational questions in Germany—that of university training for public-school teachers—was argued pro and con. After much discussion, some of which was

decidedly sharp, the following resolutions were adopted as the sense of the meeting:

I. The Seventh Conference of Prussian Teachers declares its adherence to the resolutions adopted by the meeting of German teachers at Konigsberg in 1904, in which the demand is expressed that in the future all teachers shall receive their preliminary training in the university; that for the present the elementary teachers' certificate shall be sufficient warrant for admission to university study.

II. The teachers' seminar is to be developed into an institution based upon the elementary school and equivalent to the three types of scondary schools for boys.

III. In the transition period the seminar is to be arranged as follows: [Details omitted.]

IV. All supervisory and administrative positions are to be held open to any teacher now in office without discrimination.

To the two lines of association activity, economic and educational, a third has recently been added—that of social welfare. Social welfare work on the part of teachers' associations (particularly societies of women teachers) includes: Establishing kindergartens and day nurseries; maintaining school lunches; doing vacation work of all kinds—swimming lessons, walking trips, etc.; play supervising, story-telling hours, and dramatics; aiding in the movement to improve motion pictures for school children; organizing young peoples' societies; agitating against obscenity in all forms; publishing free lists of books and purchasing books; establishing and supporting free reading rooms; giving Christmas festivals for poor school children, etc. A number of the branches of the women teachers' association are paying special attention to the problem of the girl just leaving school to go to work. This activity takes the form sometimes of personal guidance in the selection of a vocation, of evening lectures on alcohol, morals, and sex enlightenment, of parents' evenings, mothers' meetings, etc. In some cases, where the community did not furnish vocational opportunities for girls, the teachers' associations have started vocational schools for girls and supported them with private funds.

The vigorous professional spirit that gives the German teachers' organizations much of their strength also serves as a limitation to the extent of their influence. Most of the German associations of teachers are essentially of the group type. They are organizations of elementary teachers or secondary teachers or technical school professors, each with its special group activity, rather than educational associations in the larger sense. Such organizations naturally make no appeal to others than teachers who might be profoundly interested in education. One of the new developments of the last few years is the formation of societies having a more general educational purpose. Thus, the League for School Reform (Bund für Schulreform), though made up of educators, is not confined to any one group and hopes eventually to attract "laymen" to member-

ship. In its meetings teachers from elementary schools, secondary schools, seminars, etc., docents from the universities, administrative officers, and others in any way interested in education come together and begin to realize that "all educators have common problems to solve and that their common efforts may have common aims and purposes." This organization considers as its problems: The whole question of the "Arbeitsschule"; mental development and the school; types of schools; education for teachers; sex difference and its significance for education; relation of home and school. The league has held three congresses: Dresden, 1911; Munich, 1912; and Breslau, 1913. The 1913 meeting was devoted to a thorough and illuminating discussion of the problem of coeducation and coinstruction.

The effort of schoolmen to get together in educational problems with those outside of school work is noticeable in another recent conference of considerable importance. On February 8, 1913, a conference on vocational guidance was held at Charlottenburg, participated in by Government authorities, representatives of trade and industry, of labor, and of the schools. Two speakers supplied by the "Central Bureau of Public Welfare" (Zentralstelle für Volkswohlfahrt) outlined respectively the need of vocational guidance and the way in which the work should be organized. The following is a summary of the resolutions adopted at the close of the conference:

1. Vocational counseling and placement are urgently recommended for public-school pupils in the interest of the pupils themselves, as well as for economic reasons. The object of vocational guidance is the direction of young people into vocations in accordance with individual preference and ability considered in their relation to the service of the common welfare. The establishment of vocation bureaus is considered necessary also for higher positions and for feminine occupations.

2. Of special importance for the vocational guidance and placement of public-school children is the cooperation of (*a*) the school, (*b*) the school physician, (*c*) labor exchanges, (*d*) boards of trade, and (*e*) child-welfare organizations. To facilitate the common purpose, committees should be formed and should be aided by expert and trained counselors. The trade associations and women's organizations are particularly adapted for maintaining vocation bureaus.

3. This conference requests all participating bureaus to take up vigorously the task of furthering vocational guidance and placement. This conference will select a committee which shall be authorized to advance the movement in every possible way, to form a center for uniting all efforts in this direction, and to make possible an interchange of experiences. This committee shall be composed of representatives of the central teachers' association, the continuation school societies, the associations of school physicians, the labor association, the trade chambers, industrial societies, chambers of commerce, employers' organizations, together with individual vocational counselors, representatives of vocation bureaus, and other individuals whose cooperation may seem advisable upon further consideration.

An idea of the multiplicity of teachers' associations in Germany may be obtained from a glance at the following partial list of such associations for the city of Berlin alone: The Berlin teachers' society,

Society for the study of local geography, Teachers' science society, Society for school hygiene, Drawing society, Manual training association, Foreign language society, League of auxiliary schools, the Diesterweg foundation, Teachers of the deaf, Society for the improvement of language, Committee of censorship for children's books, Association of Catholic teachers of Berlin, Motion-picture committee for Berlin schools, Berlin association for vacation colonies, Central association for student walking trips, Berlin teachers' singing society, Association for the education and care of backward children. The tendency to organize societies and hold meetings is evidenced by the following conferences, conventions, and congresses held recently: Education for temperance, auxiliary schools, juvenile literature, motion pictures in education (the so-called "Kinokongress"), Protestant schools, school hygiene, tuberculosis among school children, scientific pedagogy, and education for citizenship.

CHAPTER XXXVII.

AUSTRIA-HUNGARY.

CONTENTS.—Austria—The system of general education; statistics; industrial and technical education. Hungary—Characteristics of the system of general education; statistics; industrial and technical education; protection of "abandoned children."

AUSTRIA.

THE SYSTEM OF GENERAL EDUCATION.

The organization of schools in Austria is similar to that of Germany. Elementary education is given in Volksschulen and higher elementary or Bürgerschulen. Many of the former are ungraded, especially in the country, while those in the towns or cities have from two to eight classes. School attendance is compulsory for all children, the limits of compulsion in the majority of the Provinces being from 6 to 14 years of age. In Istria, Galicia, and Dalmatia, the limits are 6 to 12. Children may obtain a certificate when they have satisfactorily completed the required course of elementary studies, but children employed in large factories must continue their education at special schools, with the aid of their employers.

The expenditures for elementary education fall chiefly upon the communes. The teachers are, as a rule, fully prepared for their calling, and the schools are well supplied with material aids to instruction. On account of the different races comprised in the Empire, the language of instruction is a subject of much discussion, and at times decided efforts have been made to force the use of the German language upon all schools. These efforts have, however, failed, and the language varies in schools, that being generally employed which is the language of the majority of the pupils in the respective school. In many schools more than one language is used by the teacher.

The secondary schools comprise three classes: Gymnasia or classical schools, having an eight years' course; Realschulen, having a course of seven years, modern languages replacing Latin and Greek; and Realgymnasia. The last have a four years' course, which may include Latin and Greek.

The secondary schools are either public (established by State or Province) or private, but all are subject to Government supervision,

follow the same programs, and prepare for the same examinations. Separate secondary schools are maintained for girls. State schools and those provided by the cities are noted for their fine buildings and liberal equipments. The following tables summarize the latest official statistics pertaining to the different classes of schools and higher institutions.

Elementary schools. [1]

Year.	Elementary schools.	Teachers.	Pupils.
1908	22,985	102,937	4,377,913
1909	23,450	105,370	4,454,238
1910	23,847	108,006	4,520,138

[1] Public and private.

The number of private schools included in the above table is comparatively few, in 1910 only 1,145.

The divisions of the elementary schools by language instruction were as follows: German language, 9,120; Czech language, 5,984; other Slav dialects, 7,153; Italian, 737; Roumanian, 173; Magyar, 5; other languages, 4. In 274 schools more than one language was used.

Secondary schools. [1]

Year.	Gymnasia.		Realschulen.	
	Number.	Pupils.	Number.	Pupils.
1910–11	296	100,652	147	48,922
1911–12	316	105,002	149	49,065
1912–13	343	108,838	148	49,151

[1] Public and private.

The above table includes the gymnasia for girls; in 1912–13 these numbered 32, with 4,797 pupils. There were also 68 "lyceums" for girls, with 11,151 pupils.

Statistics of higher institutions, 1912–13.

Universities.	Professors.	Students.
Vienna, German	666	10,225
Prague:		
German	225	2,053
Bohemian	249	4,406
Gratz, German	199	2,147
Krakow, Polish	195	3,647
Lemberg, Polish	186	5,567
Innsbruck, German	139	1,357
Czernowitz, German	61	1,189

The number of university students, namely, 30,591, included 2,624 women students, equivalent to 8.5 per cent of the total.

INDUSTRIAL AND TECHNICAL EDUCATION.

Austria is distinguished by its elaborate provision for industrial and technical education. This work is managed independently of the system of general education, and the control of the various orders of training is centralized in different ministries.

Industrial schools are under the ministry of public works, which acts in counsel with the departments of education and commerce. At the head of this system are nine central institutions, all but one situated at Vienna; the exception is the art-trade school at Prague. Every trade and mechanical occupation is represented in the remaining schools, which include polytechnic or group schools, schools for single trades, for single branches of industry, industrial continuation schools, and schools for the industrial callings open to women.

The polytechnic, trade, and industrial art schools of Austria are regarded as models for other countries. The industrial continuation schools, on the contrary, are less satisfactory. Their defects are attributed mainly to the employment of the ordinary elementary teachers, who naturally do not understand the aims and needs of schools of this order, and to the difficulty of arranging for day attendance. The ministry of public works has already taken measures to effect a change in these two conditions; hence it may be said that the industrial continuation schools are at a transition stage.

The agricultural technical schools are under the ministry of agriculture. They are all subject to State supervision and are maintained by State funds.

According to official statistics for 1909–10, there were altogether 5,721 technical and industrial schools below the grade of the technical high schools, with 381,702 students.

The close relation between trade schools and local industries in Austria may be illustrated by the schools for the gold and silver smiths trade, which are maintained in Vienna, which is famous for its trade in ornaments of precious metals and stones. In this city there are four schools for the gold and silver smiths trade—three municipal and the fourth maintained by the jewelers' guild. The branches of study include trade, commercial matters, and work in silver and gold; in the guild school is added the study of gems, etching, and engraving. The school year lasts nine months, and attendance is obligatory for all who anticipate entering into this trade. The art of making ornaments of precious metals and stones is not taught in the schools, but must be learned during an apprenticeship which lasts from three to four years; but attendance upon one of the schools mentioned above is obligatory during the apprenticeship period.

Government technical high schools, 1912–13.

Location.	Number of teachers.	Number of students.
Vienna	183	3,137
Gratz	54	758
Prague:		
German	86	884
Bohemian	151	2,738
Brunn:		
German	102	840
Bohemian	73	549
Lemberg	98	1,725
Vienna Agricultural High School	86	1,149

HUNGARY.

The system of public education in Hungary is organized on lines similar to those of Austria. Both derived their original impulse from the "*Ratio educationis*" issued by the Empress Maria Theresa, but in Hungary a new direction, modern and national, was given to the system by the efforts of Baron Joseph Eötvös, the first Hungarian minister of instruction, who was brought into prominence by the revolutionary events of 1848. In his second term as minister, 1867–1870, Baron Eötvös succeeded in carrying the elementary education act of 1868, which, with subsequent amending acts, constitutes the organic law of elementary education in force at the present time. The original law (1868) made school attendance obligatory for children from 6 to 12 years of age, and attendance at continuation schools compulsory for the ages 12 to 15. Interest in industrial pursuits was promoted by the practical subjects which were included in the original programs for elementary schools. Chief among these are the elements of natural science, with special regard to the occupations of the majority of the parents in the respective districts, practical gardening, drawing, and needlework. The tendencies cultivated in the elementary day schools are developed in the continuation schools, which at first simply continued or reviewed the subjects of the elementary schools. Since 1902 provision has been made for continuation schools having a technical character.

As regards popular education, therefore, Hungary anticipated the most important recent movements.

The secondary schools of Hungary are classified like those of Austria, as Gymnasia and Realgymnasia. Separate schools and a distinctive type of education for girls mark the system; but in 1895, by the authorization of Minister Wlasseis, young women were admitted to the university, and opportunities for preparation were afforded them by the establishment of a special classical course in the Budapest high school for girls. This school has since been transformed into a girls' classical school, and other similar schools have been established; hence the education of girls now proceeds along two lines—one marked

by modern languages and domestic science; the other assimilated to the classical schools for boys.

Statistical summary of primary and secondary schools, 1910–11.

Classes of schools.	Number.	Number of teachers.	Enrollment.
Primary	19,339	47,487	2,938,091
Training colleges for teachers	96	1,201	10,271
Gymnasia	187	3,882	63,544
Realschulen	42	1,020	14,072

Statistics of State universities, 1911–12.

Location.	Number of professors and assistants.	Number of students.
Budapest	422	6,858
Kolozsvar	139	2,405
Agram (Croatia)	91	1,189
Debeczen [1]	.....	273
Pozsony [1]	.....	224

[1] Organized in 1912.

INDUSTRIAL AND TECHNICAL EDUCATION.

Hungary is abundantly supplied with industrial, technical, and commercial schools and institutions for agriculture. The total number of pupils under instruction in these various classes of institutions in 1911 was 102,000. The law requires the establishment of apprentice schools in all communities in which there are 50 apprentices working in shops or factories; the masters of trade are obliged to provide for the attendance of their apprentices at these schools.

The technical high school at Budapest, which is on the university plane, had 160 professors and 1,676 students in 1911–12.

PROTECTION OF "ABANDONED CHILDREN."

Hungary is particularly noted for its system of infant protection, which dates from the efforts of the Countess Teresa Brunswick, who established the first infant home at Buda in 1829. She was supported in this effort by Count Szechenyi, the leader of the reform movement which spread over Hungary in the early years of the nineteenth century, and among its agencies developed an association for promoting the well being of children, which included among its members Louis Kossuth and many of his associates. Through the efforts of this association a training college was established to prepare directresses of infant homes; and in 1848, when the war of independence broke out, 89 homes were in operation. The work was crippled and the movement checked by the war, and little more was attempted in the same direction until the founding of a Froebelian association in 1869. This association and the Hungarian infant protective association have

ever since been centers of effort in behalf of young children. The State intervened actively in this work as early as 1891, at which time a law regulating this service was adopted. But it was not until 1901 that complete organization was given to the State system of infant protection. The special features of this system are as follows: Provision for the establishment of infant homes by the State and by local authorities; the requirement of special training for the teachers and for other persons on the staff of the homes; the obligation placed upon parents to send their children between the ages of 3 and 6 who can not be properly cared for at home to the infant homes. For neglect of this duty the penalty of a fine ranging from 20 filler to 1 crown (5 to 20 cents) is imposed.

Provision for the care of abandoned children is made under some circumstances in public homes provided by the State; under other conditions the children are placed in families carefully selected with regard to their mode of living and the communities in which they live. The State maintains constant and careful supervision over all such children by means of a corps of specially trained inspectors. At the present time it is estimated that 55,000 children in different families, selected in 350 communes, are under the surveillance of the State. These children are furnished with clothing at public expense, no distinction being made in this respect between them and other children in the same circle of life. About 85 per cent of all the wards of the State are committed to private families; the remainder are placed in the public homes. The latter are distinguished for their fine buildings, admirably planned and thoroughly equipped for the instruction and entertainment of children. The training is marked by sympathetic adaptation to childhood and by the use of songs, stories, and pictures of national life which inspire love of Hungary.

Ample provision is also made for the care and training of the blind, the deaf, and the dumb, and for children who are mentally defective. The education of these unfortunates is under the supervision of the State in the same manner as that of normal children in the public schools.

The demand for State control of the service arose from the inadequacy of private and communal action and was based upon the principles advocated by Herbert Spencer, namely, that every neglected child has a right to the protection of the State, and that the welfare of the State demands such action. Wide scope was given to the expression "abandoned child." It was declared that every child deprived of sufficient food and of education, either because of poverty or environment or other causes, is practically abandoned. Under this conception the protection of the State was to be extended to infants, to children of school age, and to adolescent youths between the ages of 14 and 16.

CHAPTER XXXVIII.

EDUCATIONAL MOVEMENTS IN SOUTHERN EUROPE.

CONTENTS.—Introduction—Recent events in Spain: Public-school education in Madrid; university movements—Portugal—Italy: Movements pertaining to elementary education; illiteracy; education of emigrants; welfare activities; promotion of agriculture; secondary and higher education—The Kingdoms of southeastern Europe: Disastrous effects of the B lkan war; modern schools in the Turkish Empire.

The States of southern Europe bordering on the Mediterranean are all marked by a high degree of illiteracy among the common people, and all have been recently the scene of conflicts, political or military, that have prevented the progress of education. During the present year, however, two of these States, Spain and Italy, have been free from disturbance and able to concentrate their energies upon matters of internal development, with the result that popular education has received new impulse, while the higher institutions have increased their resources and their activities.

RECENT EVENTS IN SPAIN.

The present year has given proof that the movement for the reform of primary education in Spain is firmly established in the Government policy. The movement began in 1900 by the creation of a ministry of education, which up to that time had been included within the ministry of fomento (agriculture, public works, etc.). In 1902 the State assumed the payment of teachers' salaries and the provision of school buildings in municipalities neglecting this duty. As a result of the events of 1909, which brought to a crisis the struggle between the clericals and the advocates of educational reform, the law of June 23, 1909, was passed, extending the authority of the State in regard to the appointment of teachers, the conduct of schools, etc. The most important measure in the interests of primary education was the royal decree of January 1, 1911, creating the office of "general direction" of primary education in the ministry. The same year the budget for public instruction was increased by 6,000,000 pesetas ($1,158,000). Of this increase a large proportion was assigned for primary education, and for the employment of additional inspectors, increasing teachers' salaries, and improving school buildings. The royal decree sanctioning the budget for 1911 provided that the lowest salaries

for teachers, namely, 500 or 625 pesetas, should be raised to 1,000 pesetas as far as possible.

For the improvement of teachers already in the service, short courses of training have been instituted; and the teachers' certificate, hitherto conferred by the Government upon candidates who had never attended a normal school, but who passed a very simple examination, has been suppressed.

The budget estimates for 1914 submitted by the Director General show the intention of continuing the efforts at reform in accordance with a general plan which includes increase of the administrative force; provision for sending students of the normal schools upon tours of observation for the improvement of their pedagogic, scientific, and artistic knowledge; the increase of salaries; and Government aid for the construction of school buildings.[1]

Controversy has long prevailed over the matter of obligatory teaching of the catechism in the schools, and it was announced during the year that a royal decree had been drawn up making this study optional. Eventually, however, the decree was withdrawn, and the subject is still compulsory.

The appointment of Dr. Altamira, the eminent savant, to the position of Director General of Primary Education has excited general confidence in the reform measures on account of the high esteem in which he is held by all parties. The disposition of the Government to avoid contest with the ecclesiastical authorities in regard to education is indicated by the decree respecting religious instruction in the schools. This decree provides that the catechism and sacred history shall be continued as obligatory subjects in the program of the public schools. But children of non-Catholic parents are exempt from attendance upon this instruction, at the written request of their parents.

In a recent address Dr. Altamira sums up the situation with regard to primary education as follows:

> The development of primary education depends upon three principal factors: First, financial resources; second, an efficient teaching corps; third, the absolute separation of this work from all political influence.
>
> The appropriation for primary education in the budget for 1911 amounted to 32,042,596 pesetas ($6,184,221.028). This sum was 6,000,000 pesetas in excess of the appropriation for the preceding year, but the budget for 1913 has carried a further increase of 6,000,000 pesetas, which amounts to an advance of 12,000,000 pesetas in three years.
>
> The general direction of primary education, which was established in January, 1911, has achieved a complete separation of the administration of primary schools from political influences. This central direction has organized courses for the preparation and improvement of teachers, and has succeeded in securing for them an increase of their salaries and a uniform classification. It has brought about the grading of a great

[1] *See* Lesca, Charles. Les réformes de l'enseignement primaire en Espagne. *In* Revue internationale de l'enseignement, 33me année, No. 10 (Oct. 15), 1913, pp. 256-265.

number of schools; established mutual aid societies among the pupils; introduced medical inspection of schools; increased the number of primary inspectors; and admitted women to this service. The establishment of circulating libraries and of courses of instruction for adults are among the latest evidences of progress.

These results, in the opinion of Dr. Altamira, justify the belief that the progress of public instruction in Spain rests upon a permanent basis and inspires hope for the future. This confidence is strengthened by the prosperity enjoyed by the country in 1912, which is evidenced by the reports of commercial, industrial, and agricultural activities. Great progress is reported in the planning and construction of important public works, such as railroads, highways, harbor improvements, etc., and in measures for improving agriculture, which is the chief source of wealth. Unusual success attended the exhibition of agricultural machinery held in Madrid in February of the present year. Farmers and landowners from the entire country were in attendance, and the interest manifested in the matters of machinery, dairying, etc., was so great that the exposition was prolonged through a second week.

PUBLIC-SCHOOL EDUCATION IN MADRID.

The following detailed account of public-school education in Madrid indicates the manner in which the reform measures already considered are being carried out in the chief cities:

According to the law of September 9, 1857, towns of 4,000 inhabitants should have three schools for boys and three for girls, the number of schools being increased by one for each sex for every 2,000 inhabitants over the above-mentioned number, and one-third of the total number of schools must be public. Taking the population of Madrid as 549,363 inhabitants, Madrid should have 551 schools, 184 of which should be public. Although there are more schools in Madrid than are required by law, they are far inferior to the present needs. The schools are about the same in number now as they were at the time the State took charge in 1902, but the cost to the city is greater now than it was formerly, and if the royal decree of February 25, 1911, had been enforced the expenses for running the schools would have been raised to 500,000 pesetas ($90,000) at least, without increasing the present number of teachers or gaining much in the way of hygiene and instruction, and the cause of education in Madrid might have been compromised by the pretense of increasing the number of schools. However, to obviate this, the city council of Madrid, in February, 1911, approved a plan for the reorganization of the schools officially called, until within a short time, municipal schools. This plan shows by means of figures that with the same amount of money as expended at present more teachers and better salaries can be obtained and 5,000 more children can be enrolled in the schools. This plan was at once submitted for the Government's approval, and recently action has been taken in the matter.

Before the royal decree of March 14, 1913, went into effect many teachers received, besides their regular salaries, fees from well-to-do parents for accompanying their children to the schools, and this extra payment has met with many protests on the part of the parents. Some of the cities have taken the matter up and agreed to pay the teachers the amounts thus received. By the royal decree of March 14, 1913, above referred to, the salaries of all grammar-school teachers are raised, the fees are

suppressed, and nine categories of teachers are established, receiving the following salaries: Four thousand pesetas ($720), 3,500 pesetas ($630), 3,000 pesetas ($540), 2,500 pesetas ($450), 2,000 pesetas ($360), 1,650 pesetas ($297), 1,375 pesetas ($247.50), 1,100 pesetas ($198), and 1,000 pesetas ($180). More positions for teachers are to be created.

Many teachers have made complaints against this royal decree, as even with their salary increased they would not earn as much as they formerly did with combined salary and fees. As a result, a royal order of April 5, 1913, provides that all teachers who would receive less salary by the application of the royal decree of March 14, 1913, than they formerly received by salary and fees shall receive the difference from the cities and the treasury.

School census.—Under Spanish law it is compulsory for all children between the ages of 6 and 12 years to attend school. Of the 85,713 children of both sexes of school age in Madrid, 50,052 attend school; 33,806 receiving their education in private schools and 16,246 in the public schools, not counting the pupils of the "Cárcel Modelo," who are generally above the school age, or the pupils in schools for adults. At the end of the year 1911, Madrid had 781 schools, of which number 344 were for boys, 361 for girls, and 76 for kindergarten children. Of these schools 420 were private and 361 public, the latter being classified as those supported by the State, Provinces, cities, and private societies. Among the 420 private schools in Madrid, there are 11 foreign schools. One French school for boys, recently inaugurated, and a German school for boys and girls are subventioned by their respective countries. Besides these schools there are 6 French schools for girls and 3 French schools for boys, which are supported by private subscriptions. The International Institute, an American school for girls, is supported by the Corporation of the International Institute, Boston, Mass.

New school buildings.—By royal decree of April 4, 1913, a society was founded under the protection of the Queen of Spain, the object of which is to promote the construction of new buildings to be used for public schools. The president of the society will be the minister of public instruction of Spain, and the vice president, the "Director General de Primera Enseñanza" (superintendent of primary schools). The other members will be a counselor of public instruction, appointed by the minister of public instruction; the director of the "Museo Pedagógico Nacional"; a counselor from the "Banco de España," appointed by the director or the bank; and a member of the city council of Madrid, appointed by the mayor. A general subscription is to be started, and the money obtained will be used in the construction of schools and the purchase of land and material for same. The use and care of such buildings, to be solely for educational purposes, will be turned over to the city of Madrid. The department of public instruction of Spain contributed 250,000 pesetas ($45,000) during 1913 toward the construction of schools or purchase of transportable schools; and 25,000 pesetas ($4,500) will be appropriated annually for the same purpose. The expense of purchasing supplies will be paid for by the same department, and all architectural work will be done free of charge.

Night schools for adults.—By royal orders of October 4, 1906, and October 28, 1906, and royal decree of May 19, 1911, schools for men were established. By royal decree of April 4, 1913, it is provided that schools for women shall be established in Madrid (and Barcelona), subject to the same conditions as the schools for men, 100,000 pesetas ($18,000) being appropriated for their establishment. These schools will be divided into two classes; one class will be for illiterate children over 12 years of age, or for those who wish to repeat their grammar school education; the other class will be for children of the same age who wish to extend their education. The first will be taught reading, writing, arithmetic, domestic economy, hygiene, care of children, history, geography, literature, and singing, and they will be taken to visit museums, etc., on Sundays; illiterate children and those repeating their education will be in different divisions; the other pupils will be taught French, typewriting, shorthand, commercial practice, and general work. The classes will be held from 6 to 8 p. m.,

from October to May, inclusive. The regular teachers will receive the same pay as the teachers in the schools for adults; teachers of special subjects will receive 1,500 pesetas ($270) per year. The department of public instruction is to determine the number of classes to be established, take the necessary measures for the appointment of teachers, choose location of schools, and purchase all necessary material.

New courses for teachers.—Many teachers wish to perfect their education after leaving the normal schools, and a royal order dated March 28, 1913, has been published which provides that courses to perfect and amplify the studies for grammar-school teachers shall be established wherever the department of public instruction decides. These courses will comprise lessons on methods of teaching; studies of general scientific and artistic culture; visits to the different museums, collections, and libraries; practical classes for instruction in the principal matter of the school program, in methods of drawing, singing and playing; and fundamental lectures on education, science, and literature. When it is deemed convenient, teachers will be admitted to take notes, etc., in the various universities. For the present only 20 male and 20 female teachers will be allowed to attend each course. Teachers admitted to the courses will receive 5 pesetas (90 cents) per day during their stay in the place where the course is given and reimbursement for traveling expenses in a round trip of the third class. The department of public instruction will name the professors to take charge of these courses and will determine the amounts to be expended for excursions, etc.[1]

UNIVERSITY MOVEMENTS.

In a recent address at the Sorbonne, on the opening of a center of "franco-hispanique" studies, Señor Altamira, reviewing the educational reforms in his country, dwelt upon the new spirit manifested by the Spanish universities. On this subject, he said:

> The universities are extending their field of action by exchanges with the similar institutions of other countries. They are also sending as many students as possible, including some on scholarship funds, to study in foreign lands. The traveling scholarships accorded in 1910 and 1911 numbered respectively 98 and 110; in addition, in 1911–12 there were accorded 39 scholarships for scientific research.

Among other proofs of this activity Señor Altamira noted the founding of a Spanish school of archæology at Rome, of a new center of historic research, and an institute of physical and natural sciences at Madrid, and the fact that 58,000 readers during the last year had availed themselves of the rich library of the pedagogical museum.[2]

The purpose of the Government to bring Spanish universities into more intimate relations with those of other countries is emphasized by the recent decree relative to the admission of foreign students as set forth in the following statement, which comprises an exposition addressed to the King of Spain by the minister of public instruction pertaining to the recognition of foreign diplomas and the royal decree on the subject.

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[1] Statement furnished by Mr. F. T. F. Dumont, American consul, Madrid, April, 1913.

[2] *See* Ibanez de Ibero, C. Les derniers progrès de l'enseignement public en Espagne. *In* Revue de l'enseignement internationale, vol. lix, No. 6 (June), 1913, p. 513.

MINISTRY OF PUBLIC INSTRUCTION AND FINE ARTS.

EXPOSITION.

SIR: The diploma of bachelor of arts represents in Spain, as well as its equivalent in other countries, a certain degree of knowledge which embraces the student's general culture and determines his vocation, it being more than anything else an indispensable preparation for the successful undertaking of higher studies.

The preparatory character of this degree has, no doubt, shown to countries of so high a culture as Germany the propriety of acknowledging the validity of the foreign degrees of bachelor of arts; and in England, as well as in France, those who have obtained this degree in other countries find great facilities for matriculation in the several faculties.

Spain, on the contrary, has never recognized the validity of such certificates of studies, in spite of repeated requests to do so, and for this reason there are in the above-mentioned countries perhaps more than 8,000 students from 20 different countries and from America and the Philippines who, speaking our own language, possessing our own blood, and being identified with our own literature and arts, are not identified with our science, since on returning to their own country with a professional diploma they bring with them German, English, or French science, because their mother country refuses what others grant them.

Our institutions of learning should be the means by which European science could communicate with the countries which once were Spanish. It is necessary, therefore, to open our university lecture halls to these foreign students with certain restrictions, without denying this privilege to the subjects of other States who have an organized curriculum, or to Spaniards who have made their studies abroad.

The undersigned minister, on having the honor to submit to Your Majesty the following project of a decree, does not feel actuated by reasons of an economic nature; his purpose is only to contribute to the intellectual union with the States which received from Spain the baptism of civilization.

Madrid, September 19, 1913.

SIRE: At the royal feet of Your Majesty.

JOAQUIN RUIZ GIMENEZ.

ROYAL DECREE.

In conformity with what has been proposed by the minister of public instruction and fine arts,

I hereby decree as follows:

ARTICLE 1. Diplomas, which in their respective countries are accepted on entrance into the several faculties of higher instruction, shall be as valid in Spain as if issued in the Kingdom, provided, however, they proceed from an official institution depending on the State, and that the authenticity of the same has been proved by means of proper legalization or authorized documents, and that the persons possessing such diplomas shall be duly identified.

ART. 2. The same fees shall be paid for these as are paid for Spanish diplomas of bachelor of arts.

Given at San Sebastian on this the 20th of September, 1913.

ALFONSO.

The MINISTER OF PUBLIC INSTRUCTION AND FINE ARTS,
JOAQUIN RUIZ GIMENEZ.

The minister of public instruction and fine arts of Spain announced in 1912 the institution of a vacation course for foreigners, comprising lectures accompanied by short excursions to be conducted by Spanish professors, but under the general direction of Prof. D. Ramon Menendez Pidal.

The detailed program shows that the subjects of the lectures related chiefly to the literature of the succeeding centuries from the fifteenth to the nineteenth, inclusive, together with current literature.

The visits to the principal art museums of Madrid, namely, the Prado (the national museum of painting and sculpture) and the Museum of Modern Art, were directed by Manuel B. Cossio, professor of pedagogy in the University of Madrid and director of the National Pedagogic Museum; the visits to the Archeological Museum and the Royal Armory were under the direction of Señor Manuel Gomez Moreno. Excursions were also organized for Toledo and the Escorial, and to Avila and Segovia, under the conduct of Señor Moreno.

PORTUGAL.

The political upheaval which resulted in the overthrow of royal power in Portugal and the establishment of the republican form of government, proclaimed October 5, 1910, has been attended by radical changes in the education laws and administration. Primary education is compulsory, according to a decree of the provisional government bearing date, March 29, 1911, and so far as circumstances permit this decree is rigorously enforced. Official statistics for 1911 give a total of 7,120 primary schools, of which 6,320 were public. These statistics, which did not include either the enrollment of pupils or the number of teachers, are the result of a preliminary endeavor on the part of the Government to find out the actual state of the school provision in the country. It need hardly be said that many of the school buildings reported are totally unfit for their purposes, and it is recognized that before the compulsory law can be fully enforced the number of buildings must be increased and efforts made to fit them for the purposes of instruction. The condition of the secondary schools is encouraging; these enrolled 9,749 pupils in 1911, and 10,621 in 1912. In the latter year the universities registered 2,673 students; the School of Fine Arts at Lisbon, 963; and the Military Academy, 352.

The current discussions respecting education are indicated by a bill which was presented to the Legislature during the present session, having for its purpose the establishment of a new order of schools termed "Jardins d'Adolescents," i. e., schools for children from the ages of 6 to 18, in cities having more than 30,000 inhabitants.

The proposition recalls the interest long manifested by representative men and women in Portugal in the idea of education as a training of the whole nature, under conditions favorable to the highest development of body and mind.

The draft of the law is introduced by a review of present conditions in Portugal and a synopsis of the principles of Pestalozzi, of Girard, and others. The proposed schools are to be organized upon the model of the "new schools," which have sprung up in different countries of Europe since the original experiment was made at Abbotsholme, England. The author of the bill, Sr. Pinto, says:

> The new school should be an institution established by private initiative or that of a municipality, situated near a city, at a distance of not more than 15 or 20 minutes ride by cars, and furnished with all the equipment required for physical education, scientific training (museum, laboratories, etc.), aesthetic culture (painting, music, singing), and social training (industries, community life).
>
> The foreign schools of this order, "gardens for adolescents" as they are often called, are intended for secondary education; but with us, since there are no infant schools that can prepare for such an institution, the new school, temporarily at least, should take children at an early age, that is to say, 6 years, and retain them through the period of adolescence; that is, up to the age of 18 years.

The draft of the bill was accompanied by an outline of the organization of the proposed schools. As examples of the system in operation, Sr. Pinto mentions besides Abbotsholme, Sunlight in England, Les Roches, in France; Haubinda, Ilsenburg, and Bieberstein, in Germany.

ITALY.

MOVEMENTS PERTAINING TO ELEMENTARY EDUCATION.

The purpose of the Italian Government to extend and equalize the provision of elementary schools throughout the country was indicated by the passage of the act of June 4, 1911, which transferred the school administration from communal to provincial authorities in the case of communes in which more than 25 per cent of the inhabitants were illiterate. This act was followed by special appropriations to aid communes in building schoolhouses and by increased appropriations for the support of schools. The expenditure by the State for elementary education, which was 5,756,171 lire ($1,110,941) in 1903–4, reached 26,791,116 lire ($5,170,685) in 1911. The total appropriation for education for 1912–13 amounted to 138,700,000 lire ($26,769,100), of which 56,000,000 lire ($10,808,000) was for primary education, including ordinary and extraordinary expenditures. It was expressly ordered by the act confirming this appropriation that 45,000,000 lire ($8,685,000) should be used to insure the appointment of new teachers or to increase the salaries of those in the service. This provision was necessary, since, as a result of the multiplication of schoolhouses, about 4,000 schools are in charge of untrained teachers, and 403 buildings are closed from want of teachers.

It may be recalled that, in view of the dearth of schools in southern and central Italy, an act of 1906 made provision for 18,000 new schools in these sections, at an expenditure of above 18,000,000 lire ($3,600,000), of which 11,000,000 was contributed by the State and the remainder by the communes.

The importance of increasing the provision for primary instruction was emphasized by the fact that at the election which took place November 2 of the present year, the first under the electoral law of June 30, 1912, a large proportion of the five and one-half million new voters were illiterate. The electoral law referred to made the suffrage universal for men, excepting only those under 30 years of age who have neither performed their military service nor learned to read and write. The increase of illiterate voters was largely from the southern Provinces of Italy; in one village, it is said, not a single elector was found able to read and write on polling day. In view of this condition the Premier declared that "the shame of illiteracy can no longer be neglected." The determination of the Government to eliminate the evil is indicated by the continued appropriation for building schoolhouses, which carries about $15,000,000 to be expended in this work in the period 1913–17.

The actual extent of school attendance throughout the Kingdom is not known, as school statistics are only reported quinquennially, the last bearing date 1907–8, but it is certain that since that year school facilities and school attendance have been increased in the Provinces that were extremely backward.

ILLITERACY.

The movement for extending popular education is not related solely to children of school age. The problem of adult illiteracy has excited special attention throughout the last decade, by reason of the alarming revelations of the census of 1901. At that time 48 per cent of the people above 10 years of age could not read, the only other European countries standing so low in this respect being Spain, with 58 per cent of illiterates, and Russia, with 70. Public-spirited men and women throughout Italy joined in a movement for ridding their country of this evil; and the census of 1911, just published, shows decided improvement, the ratio of adult illiterates having fallen to 30.8 per cent for the entire Kingdom. Piedmont, in the northwest, shows the lowest ratio, viz, 2.9 per cent; and Calabria, in the extreme south, the highest, 63.6 per cent. Even here there has been a reduction, as in 1901 the proportion of illiterates in the population above 6 years of age was 78.7.

EDUCATION OF EMIGRANTS.

The efforts for overcoming adult illiteracy have been promoted by the interest in the condition of emigrants who, in ever-increasing numbers, depart for new fields of labor in Europe and on the American Continent. In 1901, a commission was established under the ministry of foreign affairs for the direction of the Government service relating to emigration. The first efforts of this commission were directed to the physical welfare of the emigrants, and a service of sanitary inspection was instituted and a medical officer assigned to every emigrant ship for the oversight of the Italian contingent during the passage. The movement for giving special instruction to emigrants, which was described somewhat in detail in the previous report of this series, was started by private societies; it has grown to large proportions and has been brought under the general supervision of the Government. At the opening of a course of instruction established at Rome for teachers who are sent to the ports where emigrants are detained for inspection and instruction, the Italian commissioner of emigration gave an address on the growth of this movement, in which he carefully distinguished between the part which the State can perform in this respect and the activities of private societies. He said in part:

> Already we can perceive the dawn of the emancipation of the emigrant, symbolized in Italy by the formation of tutelary associations, supported by the emigrants themselves and by a press specialized in the interests of the emigrants; and, outside of Italy, by the creation of nuclei of the emigrated and their descendants, who are conscious of their strength and proud of the glorious past of the race from which they sprang. These germs, from which a superior form of tutelage is bound to evolve, need help, but this help can not all be derived from the State. This may develop its own action with the development of the popular school understood in the ampler sense of the word.

WELFARE ACTIVITIES.

Social science has received much attention in the universities of Italy, which explains, in part, the many practical efforts undertaken for the amelioration of social conditions, and the union of philanthropy and scientific method which marks these efforts. This combination is shown in the establishment of open-air colonies for delicate children of the poorer classes. The first attempt of this kind was made in December, 1902, at Padua, by the committee for the campaign against tuberculosis. The president of the committee was a senator, Achille de Giovanni, who was also a professor at the University of Padua. At Barbarano, a suburb of Padua, a site was secured on the southern slope of the Berici hills, and here, in a pavilion large enough to accommodate 10 children and the director, the first colony was established. Soon after, by the aid of a subsidy from the city of Padua, two more pavilions were added and the number of children

increased to 30. A second colony was established in the autumn of 1905, on an elevation on the outskirts of the city of Padua, the Red Cross society giving tents and the benevolent associations supplying the furniture and current expenses. This autumnal colony, called *Ricreatorio per fanciulli deboli,* was under the direction of Dr. Allessandro Randi, chief of the medical service of the city. Here 54 children, from 5 to 12 years of age, were received during the months of September and October; they were kept in the open-air eight hours a day the first month, and six hours a day the second month, and were fed twice daily during the former period and once daily during the latter period. The children were selected by a special committee from the pupils of the primary school, and when the Ricreatorio was closed for the winter the physicians in charge continued the oversight of them at their homes, assisted by one of the school inspectors. These colonies were not intended for instruction, but for physical recuperation, and it was not until 1907 that school exercises were commenced under the charge of a regular teacher. The classes were so managed that delicate children in the ordinary schools could be sent in groups of 30 to spend an hour a day in the open air.

In the period 1907–1911 provision for similar colonies was made by three other cities, Milan, Rome, and Genoa, and although in every case the primary purpose has been to promote the health and physical strength of delicate children, provision for class instruction has become a feature of the work. The results of these recuperative colonies and open-air classes have led to a vigorous campaign in behalf of open-air schools similar to those in Germany, England, and the United States. The ardent champion of this cause, Prof. Lauriti, has aroused great interest by his articles published in the Tempo and other journals of Italy, which have won to the support of the cause many representative men, including the minister of public instruction, Señor Credaro. The movement merges into the larger question of school reform, which is exciting great attention throughout Italy. As regards the early period of training, this interest is fostered by the *Unione Nazionale Educatrici Infanzia;* and as regards the period of adolescence it is promoted by the university faculties of pedagogy, which, as a rule, are in full sympathy with the modern scientific movement with its emphasis upon the psychological and biological relations of educational processes.

PROMOTION OF AGRICULTURE.

The great importance of agricultural education in Italy is indicated by the fact that 92 per cent of the entire area is productive, and according to the census of 1901, out of a total population numbering 25,386,507 above 9 years of age, 9,611,003 (37 per cent) were engaged in agriculture, forestry, and cattle rearing.

The interest of the Government in promoting agriculture was indicated by the endeavor made nearly a decade ago to establish an international institute of agriculture, which, after extended correspondence with foreign countries, was successfully achieved in 1905. At that time 40 Governments entered into the agreement, and 10 others have since become signatories, so that the institute now includes nearly the whole civilized world. It is a Government institution in which each adhering power is represented by delegates of its choice; the work is carried on by a general assembly and a permanent committee. The scope of the institute, which is situated at Rome, is indicated by its organization, comprising:

(1) A bureau of general statistics for the collection, coordination, and publication of statistical data pertaining to agricultural subjects. This bureau publishes a monthly bulletin of agricultural statistics and an international yearbook of the same character; also from time to time monographs on questions of current interest.

(2) Bureau of agricultural intelligence and plant diseases. This bureau also publishes a monthly bulletin pertaining to its specific inquiries.

(3) Bureau of economic and social intelligence. This bureau collects and publishes information on economic questions affecting agriculture, especially such as relate to agricultural cooperation, insurance, and credit; and, like the other divisions, publishes a monthly bulletin and from time to time special monographs on the subjects that come within its province.

The library of the institute publishes a weekly bibliographical bulletin and also a yearbook of agricultural legislation, and promises to become a most complete depository of bibliographical documentary literature pertaining to agriculture.

The commission appointed by President Wilson to investigate and study rural credits and agricultural cooperative organizations in European countries found in Italy a rich center for the study of various forms of cooperative associations and rural finance. A system of partnership between proprietors and cultivators is highly developed in Tuscany and Umbria; and the savings bank of Florence, one of the greatest institutions of the kind in Europe, is specially noted for the volume and method of its land-credit business.

At Milan the attention of the commission was directed to the cooperative institutions for which Italy is noted, while the surrounding country afforded opportunity for studying the methods of intensive cultivation applied to wheat, corn, and silk breeding. The great productiveness of the Province of Lombardy is attributed to the system of irrigation, which utilizes the water of near-by lakes, and also in enormous quantities the sewage waste of the city.

The Italian Government has adopted a plan for reclaiming the Pontine marshes, and it is hoped that within the next 10 years they

may be brought under cultivation. The Government is to provide about a million and a half dollars for the enterprise, and the proprietors the rest of the required funds.

SCHOOLS OF AGRICULTURE.

In accordance with an act of June 6, 1885, schools of agriculture are under the supervision of the minister of agriculture, industry, and commerce. They are established either by communal or provincial authorities, which provide an experimental farm and two-fifths of the expenses of the school, the State bearing the other three-fifths. Each school is managed by a committee whose members are appointed partly by the Government and partly by the local authorities sharing in the expenses. The schools are classified as practical and special. The course of study for the former covers three years and includes, besides the elementary branches, geometry, surveying, drawing, accounts, natural and physical sciences, and agriculture. Sometimes a fourth year is added for practical work. Boys are admitted at 14 years of age, but not after the age of 17.

The special schools of agriculture are of two grades. Those of the first grade are organized like the practical schools, but the agricultural training relates to a particular branch, as dairying, horticulture, and vine-raising. The schools of the second grade, four in number, are all devoted to vine-raising and wine making, and their admission requirements are similar to those of the secondary technical schools.

In 1912 there were 30 practical schools, having 1,120 students, and 7 special schools, with 533 students.

SECONDARY AND HIGHER EDUCATION.

The year has been marked by discussions in the public press and in the legislature relative to the condition of secondary education and the wants of the universities. In this connection it may be recalled that in 1906 a royal commission was appointed to investigate the entire field of secondary education. The report of this commission included a proposal that the secondary schools should be organized in two grades, the first grade covering a period of three years, and comprising three divisions, as follows:

(1) *Ginnasio,* intended as a preparatory division for higher secondary schools, i. e., *licei,* having a five-year course leading directly to the universities.

(2) A technical division, *scuola technica,* preparing for a higher-grade technical school.

(3) *Scuola complementare,* corresponding to the French higher primary school, intended to complete the course of elementary education.

This proposition has been under discussion for nearly two years, but without definite results; it is interesting to note its resemblance to the plan of junior and senior colleges adopted in some places in the United States.

During the scholastic year 1912–13, the number of students registered in the Italian universities was 20,708, distributed as shown in the table below. There were also 153 persons who attended without having matriculated, making a total of 20,861. The University of Naples led, with 3,785 students, which is 500 less than the number in the previous year. Rome followed, with 2,895, an increase of about 40 over the previous year.

It is noticeable that comparatively few foreign students resort to the Italian universities. The total number of such students for the year reviewed was 228 regularly subscribed, and 11 attending lectures. The number of women students was 2,093.

The complaint is made in Italy of the excessive number of universities, several of which suffer from insufficient resources; the proposition has repeatedly been made to convert the smaller universities into higher-grade secondary schools, or into specialized schools adapted to the needs of their localities, but provincial pride has thus far rendered such action impossible.

In addition to the universities, there are 11 private institutes for higher education, of which the most important are at Milan and Florence. The others are special institutions of engineering, veterinary medicine, etc. The total number of students in these institutes in 1912–13 was 3,988, including 87 auditors.

Italian universities, 1912–13.[1]

	Students.	Auditors.
State universities:		
Bologna	1,577	10
Cagliari	222	.....
Catania	1,059	1
Genoa	1,192	9
Macerata	311	.....
Messina	234	1
Modena	450	.....
Naples	3,773	12
Padua	1,503	3
Palermo	1,493	2
Parma	387	.....
Pavia	1,066	9
Pisa	891	7
Rome	2,821	73
Sassari	160	1
Siena	280	2
Turin	1,833	13
Free universities: [2]		
Camerino	368	5
Ferrara	546	1
Perugia	239	3
Urbino	303	1
University courses (Licei of Aquila, Bari, Cantanzaro)	197	.....
Total	20,905	153

[1] Bolletino ufficiale del ministero dell'istruzione publica, May, 1913, pp. 1354 et seq.
[2] Free from State control.

THE KINGDOMS OF SOUTHEASTERN EUROPE.

In the Kingdoms of southeastern Europe all internal developments were stopped by the Balkan War. The only educational events of which recent information has reached this bureau relate to schools under foreign auspices in the Turkish Empire.

MODERN SCHOOLS IN TURKEY.

The reform of education in Turkey proposed by the Young Turk Party had not passed the paper stage when the Balkan War broke out, ending for the time all efforts in that direction. The schools of the mosques continue their instruction in the Koran and in elementary arithmetic as usual; in Constantinople the secondary schools, modeled generally after the French lycée, and a few special schools—the Imperial School of Medicine, Imperial Art School, Greek National School, and the Greek Theological Seminary—are still in operation.

For modern education the Turkish Empire depends almost entirely upon schools of the Roman Catholic and Protestant missions, which are found in the principal towns of Turkey in Europe and Turkey in Asia, and which, even in the former division, continued operations wherever possible during the period of war.

Robert College.—Robert College, Constantinople, maintained its work while the war raged, without interruption and with little diminution of numbers. Through the legacy of $2,500,000 from the estate of Mr. John S. Kennedy, of New York, the college was placed upon a solid basis in 1910, and extensive building plans were at once adopted and are still in process of execution. The latest published report from the institution covers the forty-eighth year of its operation, which closed August 1, 1911. The number of students for that year was 427, representing 17 nationalities: The Greeks led, with 198 students; and the Bulgarians, Armenians, and Turks were represented by 68, 62, and 61, respectively. Of the remainder, 16 were Israelites; other nationalities had small representation, ranging from 1 to 5 students. Among the religions represented were Greek Orthodox, Protestant, Moslem, Jewish, Greek Catholic, Roman Catholic, Armenian, and Syrian Catholic.

The teaching force is even more cosmopolitan than the student body, but the larger proportion of the members are Americans, graduates of American universities and colleges, native teachers being employed chiefly for language instruction, though all the regular class exercises are conducted in English.

President Gates has been wonderfully successful in infusing the American spirit into the college activities, which is promoted also by the possession of a gymnasium and athletic field; the exercises of

Founder's Day recall similar exercises in the United States, the serious part of the program being enlivened by college songs, athletic exercises, etc.

Robert College is undoubtedly the most prominent institution of learning in the Ottoman Empire. In the opinion of all authorities familiar with movements in that country, it has done more than any other one agency to raise up leaders among the races of the Empire and the adjoining States. Naturally, there is much rivalry in the institution, but each year tends to lessen hostile feelings among the students. A striking testimonial to its unifying influence, as well as that of the American College for Girls, is given by Sir Edwin Pears, an Englishman long resident at Constantinople, in his recent work, "Turkey and its People." This writer attributes the transformation that has taken place in the minds of educated and thoughtful Moslems to the gradual infiltration of modern ideas through the work mainly of these two institutions.

The affairs of Robert College are directed by an American board, of which Mr. Cleveland H. Dodge, of New York. is the president, and Rev. Edward B. Cole, D. D., secretary.

The American College for Girls at Constantinople is in the process of removal from the site near Scutari, on the Asiatic side of the Bosphorus, to a fine position on the heights of Anaaout Keuy on the European side, 6 miles from Constantinople. The erection of the new buildings was begun in 1910, and the preparatory department was transferred to the new quarters in 1911; the work on the college buildings has since been rapidly pushed. The main group will consist of seven buildings, including Gould Hall, the administration office, the gift of Helen Miller Gould; the science building, Henry Wards Hall, the gift of another American woman; two dormitories, one the gift of John D. Rockefeller, who also furnished the power plant. All departments will be equipped after the best model of American colleges. Money has been freely contributed by friends in America to carry out the structural plans, but these emphasize anew the need of endowment funds for the maintenance of the educational work itself, which at present depends largely upon voluntary subscriptions.

This institution was opened in 1871 as a high school under the charge of the woman's board of home missions, Boston, Mass. In 1890, the standard of scholarship having been approved by the State legislature as sufficient, the school was incorporated as a college by "act of the Commonwealth of Massachusetts;" and under the presidency of Dr. Mary Mills Patrick, assisted by a strong faculty, it has well sustained its enlarged responsibility.

Candidates for admission to the freshman class of the college must pass an examination which includes English, geography, arithmetic

and algebra, history, French or German, and a classical language or vernacular. The regular college course leading to the bachelor's degree extends over four years; candidates for the degree must complete before graduation the equivalent of 60 one-hour courses, of which a certain number are required and the rest elective.

The student body is thoroughly cosmopolitan, including at the present time some 17 nationalities, principally Turks, Bulgarians, Armenians, and Greeks. The college enjoys the confidence of the Government, which, during the last year, was supporting several Mohammedan students, who were under promise to teach in Government schools after graduation. The need of young women prepared for teaching is very great in the Turkish Empire, over 12,000 being required to meet the demands, for which only about 500 women are available. The college, therefore, hopes to secure funds for the support of a professional school after the model of Teachers College, New York City. Instruction in manual arts and crafts, in household arts, and in hygiene and sanitation is another urgent requirement of Turkish women at the present time. One of the professors of the college has arranged for general lectures to be given to women on these subjects by well-known physicians and experts.

The graduates of the college number 124, representing 14 different nationalities. Mohammedan students, who were formerly prohibited from attending an institution of this character, now form a large element of the student body, and two adherents of this religion have already graduated.

This institution, like Robert College, is under the charge of an American board, of whom the acting president is Grace H. Dodge, of New York, and the secretary, Samuel C. Darling.

Syria forms a part of the Turkish Empire in Asia, covering an area of 114,530 square miles, with a population of 3,675,100. It comprises six vilayets (districts), with populations ranging from 200,000 in Lebanon to 1,500,000 in Aleppo. In this division of the Empire French influence predominates. Primary schools, secondary and higher schools, have multiplied, and have brought to the Syrians through the medium of the French language an occidental civilization which is superposed upon the old Arabian civilization.

Beirut is the center from which modern knowledge, ideas, and liberal aspirations are diffused throughout this Province. Among the noted institutions of this city are the Syrian Protestant College and the Catholic University of St. Joseph. The former was chartered under the laws of the State of New York on April 24, 1863, and opened in 1866 as an interdenominational institution. It includes at present a preparatory department, collegiate department, medical school, and a school of commerce. Plans for schools of law, engineering,

and agriculture have been approved by the trustees and will be begun as soon as adequate funds are secured. The direction of the affairs of the institution is vested in a board of trustees in New York City, of which the president is Mr. D. S. Dodge.

The University of St. Joseph, at Beirut, is a Catholic institution which received the Papal sanction in 1881, and, under the charge of the fathers of the Order of St. Joseph, has maintained vigorous existence to the present time. This institution is formed after French models, including both secondary and university departments. The oriental faculty has been especially distinguished for the erudition of its graduates, and the large alumni association includes many eminent scientists and oriental specialists.

CHAPTER XXXIX.

RUSSIA.

CONTENTS.—Statistics of primary schools, 1911; the primary education bill; commercial education; agricultural education.

The Report of the Commissioner of Education for 1912 contained a brief survey of education in Russia, including the organization of the public system and an account of pending legislation as related in particular to primary education. Since that report was published the Russian census of 1911 has been issued, and according to the Statesman's Year-Book presents the following statistics of primary schools throughout the Empire:

Statistics of elementary schools, 1911.

	Number of schools.	Number of teachers.	Number of pupils.
Ministry of public instruction	59,682	130,019	4,186,078
Holy Synod	37,922	66,525	1,793,429
Other ministries and various foundations	2,691	6,729	201,003
Total	100,295	203,273	6,180,510

The foregoing table shows increase in the total of primary schools and enrollment above that reported for 1910-11 in the Russian yearbook; for the enrollment the increase amounts to nearly 2,000,000 pupils. The figures may not be entirely accurate, as, from the extent and character of the Empire and the imperfect statistical methods, it is hardly possible to show the status of primary schools from year to year; but the general development, political and social, for example, the growing independence and activity of the zemstvos (county authorities) and the efforts for the improvement of the rural communities, and furthermore the support given in the Duma to the bill for compulsory education, make it certain that provision for primary education is rapidly extending.

THE PRIMARY EDUCATION BILL.

In 1911 the Third State Duma approved a project of a proposed law in regard to universal primary education in Russia. This proposal was sent up to the Council of State in January, 1912, but the Right

Party of the council made drastic changes in the propositions of the projected law which were not accepted by the Duma, and therefore the bill was virtually rejected.

The conflict between the cabinet ministers and the Fourth Duma during the present year has prevented any progress in legislation affecting public education.

COMMERCIAL EDUCATION.

Among the modern movements that are taking place in Russia, special importance attaches to the provision for commercial and agricultural education.

The commercial schools of Russia are established either by the merchant societies of cities or by private individuals, but they are under the control of the Ministry of Trade and Industry.

The following information pertaining to this class of special schools is derived from a recent consular report on the subject:[1]

Schools of commerce and trades.

Classes of schools.	Number of schools.	Number of students, 1911.		
		Male.	Female.	Total.
Higher institutes	5	4,641	1,275	5,916
Commercial schools	202	37,884	8,880	46,764
Trade schools	100	11,944	3,213	15,157
Trade classes	23	3,740	870	4,610
Commercial courses	69	3,637	1,842	5,479

The following shows the grouping of pupils by nationalities: Russians, 33,030; Poles, 12,220; other Slavs, 185; total, 45,435. The Hebrew pupils numbered 20,136; Germans, 2,957; Lithuanians, 2,703; other nationalities and pupils concerning whom no information has been obtained, 6,695.

The expenses for running the schools amounted in 1911 to $5,289,052, while the revenues were $5,312,298, thus leaving a surplus of $23,246.

The principal source of revenue of the schools is the tuition fees, which represent about 93 per cent of the same.

The special courses are similarly placed, 89.9 per cent being covered by fees. Descending in the scale of types, the importance of these fees decreases; in the case of commercial schools it is 62.1 per cent, and in trade schools 51 per cent. In private commercial colleges the fees make 86.3 per cent, and in the schools 99.8 per cent. Nonprivate institutions are to a high degree dependent on fees for diplomas and certificates, viz, 12.8 per cent in the case of the higher type, 8 per cent in that of trade classes, and 5.9 per cent in that of schools.

This last-named source of income does not apply to colleges of the highest (or university type), nor to courses on special subjects.

Another source of revenue is the school tax on trade certificates. The Government treasury gives but very slight assistance to the schools, about 1½ per cent of the revenues.

[1] From a statement forwarded by Mr. John H. Snodgrass, American consul general, Moscow, March, 1913.

Of the 399 schools, only 73 have their own buildings, the value of which amounts to $6,500,000. These figures afford a clue to the importance of the various types of institutions in the minds of the Russian merchant and business man himself.

Another matter of interest is the social class from which the various groups of students are drawn. The total is derived by 10.8 per cent from gentlemen's families, by 1.1 per cent from those of clergymen, and 16.3 per cent from professional circles, by 43.2 per cent from the lower middle classes, by 23 per cent from peasants, by 4.7 per cent from miscellaneous sources, and 1.1 per cent is contributed by foreigners.

Thus, the middle class furnishes the largest per cent of students, not only for all the institutions, but for each type taken individually, with the sole exception of the trade classes; in these the peasants lead, with 43.3 per cent of all the students.

These data point to the conclusion that commercial training is most in demand by the inferior type of business men, affording as it does a preparation for the intended calling as well as a form of general education, while the higher classes lay greater stress on general education and erudition. The consular report says:

In studying the history of these commercial institutions, two striking features appear, first, the fast and uninterrupted growth of the institutions of middle and lower type, most rapid since 1899—though 1895 already indicated the coming ascendancy—and second, the circumstance that the chief item in the budget is formed by the fees of the students. These two factors are full of significance, as they point to the awakening and increasing activity of the Russian merchants.

AGRICULTURAL EDUCATION.

The following information in regard to agricultural education in Russia is derived from the official reports of the department of agriculture, covering the period 1902–1912, inclusive:[1]

Up to last year statistics in connection with agricultural schools were only published at lengthy intervals. Now, however, in view of the steady increase in the number of such schools and the importance of the sums expended upon them by the Government and the zemstvos (county authorities), the interest displayed by the public in the results attained has grown to such an extent that from now on the Government proposes to issue annual statements as to the activities of the schools.

Some years back the agricultural schools scattered throughout Russia were dependent on several ministries. For instance, the ministries of justice, interior, agricultural and imperial domains all had schools within their jurisdiction. During the last two years this has been changed and all the agricultural schools in Russia are now dependent upon the ministry of agriculture.

During the period from 1910 to January 1, 1912, the number of agricultural educational institutions under the jurisdiction of the ministry of agriculture increased from 239 to 281. These institutions can be grouped as follows: Higher grade, 5; middle grade, 15; lower grade, 152; practical schools, 65; primary schools, 13; agricultural reformatory schools, 9; childrens' homes, 3; other agricultural courses, 19.

[1] Information forwarded from the American Embassy at St. Petersburg, March, 1913.

In 1899 the number of schools was 133. During the year ending January 1, 1912, 47 new educational institutions began work and 5 were closed. The latter were all private institutions in receipt of subsidies from the treasury.

As regards the cost of the schools, the final total of grants made during 1911 for meeting the requirements of 255 educational institutions was 5,295,741 rubles (United States equivalent, $2,727,307); of this total the treasury grants amounted to 2,721,661 rubles ($1,401,656), and allotments from the zemstvos and other public bodies to 1,128,186 rubles ($581,016). The fees paid by students, and income from sale of products of the schools, together with other special receipts, amounted to 1,446,894 rubles ($745,150). In 1899 the total expenditure from all sources on agricultural education was 2,076,499 rubles ($1,069,397). Of the grants made by the treasury during the year ending January 1, 1912, 1,395,310 rubles ($718,585) went to 47 Government institutions, and the balance of 1,326,351 rubles ($683,071) represents subsidies to 191 schools belonging to zemstvos, social bodies, and private persons.

Some idea of the way in which the money requirements of the agricultural schools are growing may be obtained from an examination of the following figures:

Income of agricultural schools.

Sources.	1909	1911	Increase.
Grants from the treasury (rubles)	1,929,552	2,721,661	792,109
United States equivalent	$993,719	$1,401,655	$407,936
Income from other sources (rubles)	2,407,704	2,575,080	167,376
United States equivalent	$1,239,866	$1,327,711	$87,845

From this it will be seen that the treasury during the year 1911 increased its participation in the support of agricultural schools to the extent of 41 per cent.

Since 1910 the department of agriculture has begun to assist zemstvos in supporting low-grade schools by means of simultaneous grants for their equipment.

The expenses in connection with the running of agricultural schools during 1911 amounted to 3,982,818 rubles (United States equivalent, $2,051,151). Unfortunately, no accurate comparison of expenses can be made with previous years, owing to lack of statistics. The following figures, however, will be of interest as showing the average growth of expenses in connection with the various categories of agricultural schools:

Average current expenses of agricultural schools.

Grades.	1909	1911	Difference.
	Rubles.	*Rubles.*	*Rubles.*[1]
Middle-grade schools	63,354	71,806	8,452
Lower agricultural schools	18,659	20,852	2,193
Schools of first grade	12,870	14,941	2,071
Schools of second grade	9,117	9,244	127
Schools in the Steppe and in the Turkestan general governorship	5,229	6,598	1,369
Garden schools of the first grade	10,436	15,212	4,776
Garden schools of the second grade	6,441	7,533	1,092
Dairy schools of the second grade	3,418	6,553	3,135
Practical schools	4,045	5,223	1,178

[1] Exchange value of a ruble is 51½ cents.

The increases noticeable in the expenses are attributable to the application of the resolution as to agricultural education imperially confirmed on May 26, 1904. This resolution provided for a substantial increase in the remuneration of the personnel, attaining in some cases as much as 100 per cent.

The cost of the personnel of the schools and the expenses in connection with teaching—for which purpose the treasury grants are generally made—represent about one-half of the total expenses of the schools.

As regards the number of scholars attending the schools and courses, available statistics show that on January 1, 1912, there were 16,137 students attending 253 agricultural institutions, as against 10,237 attending 185 schools in 1909 and 5,992 attending 133 schools in 1899. During 1911 there was an average of 63 students for each school, as against 55 in 1909, an increase which has, beyond doubt, resulted in reducing the annual cost of educating each student. Notwithstanding the great increase in the number of those attending the agricultural schools, a demand for a substantial increase in the number of schools is still great, as is strikingly shown by the number of would-be students who could not gain admission. In 1909, 6,303 persons requested admission to the schools; of this number, however, only 2,925 were taken—that is, 49 per cent. In 1911 the number of petitions for entrance to the schools was 15,929, of which only 6,150 were granted; in other words, hardly 39 per cent. In this respect the following figures will be of interest:

Entrance to agricultural schools—Petitions presented and accepted.

Grades.	Petitions presented.	Accepted.	Per cent.
1. Higher classes and courses	1,675	1,107	66
2. Middle	2,685	633	24
3. Lower-grade colleges	2,705	988	37
4. Lower schools and others	8,865	3,422	39

In recent years there has arisen a great demand for men with a middle-grade agricultural education, and this has had the effect of increasing the number of those desirous of entering the middle-grade schools. This class of school is now making every effort to accommodate as many students as possible; its endeavors in this direction resulted in an average of 195 pupils accommodated by each middle-grade school during 1911, whereas in 1909 the average number of students getting instruction at these schools was 145.

During 1911, 1,918 students graduated from the agricultural schools. In the year ending January 1, 1912, the number of peasant children at the schools increased by 9 per cent; they represented 62 per cent of the total number of students, as against 53 per cent in 1909. For the most part this increase affected the lower-grade schools.

As to the present activities of former pupils, the agricultural department was able to obtain particulars in regard to 76 per cent of the graduates. The following figures will show how these latter at present are employed:

Employment of agricultural graduates.

	1909	1911
	Per cent.	*Per cent.*
Working on their own farms	41	12
Working on farms		42
Serving as instructors in schools	5	6
Engaged in other professions	8	9
Being educated at other institutions	5	4
Serving in the army	.....	2
Deceased	.....	1

From the above it will be seen that 54 per cent are employed in agricultural pursuits and 6 per cent have taken to teaching, for the most part in the low-grade agricultural schools. If it is assumed that half of the 24 per cent of the graduates of whom no statistics are available are engaged in farming, that half of the 4 per cent continuing their studies are doing so at agricultural schools, and that half of the 2 per cent serving with the colors will eventually adopt agriculture as their profession, we find that 70 per cent of the graduates from all the agricultural schools in Russia are engaged on the land.

CHAPTER XL.

MODERN EDUCATION IN ASIA AND AFRICA.

CONTENTS.

Asia: Japan—Primary education; secondary and higher education; students in foreign countries; expenditure for public education.—Siam.—Modern education in China; order of the minister of education relating to technical schools; order of the minister of education relating to the unification of the spoken language; education in the Province of Kwangtung; education in the Province of Amoy.—India—The new Government policy; changing attitude of the Mohammedans; revivals in literature and art; statistical summary.
Africa: The French colonies. The Italian and German possessions. Liberia. Egypt. South Africa—Education for the Europeans; present problems; education of the colored and native children; expenditure; higher education.

ASIA.

The movement of modern education in Asia presents three phases of great interest. In Japan, China, and Siam it is a movement of internal origin; in India it is the outcome of foreign dominion; while elsewhere in this vast continent modern schools have been established by missionary effort or are the outcome of commercial and imperial advance.

The following statements comprise information respecting modern education in the different divisions of Asia, which has been received at this office since the publication of the Commissioner's Report for 1912.

JAPAN.

The establishment of a system of modern education in Japan is one of the most notable achievements of the nineteenth century. The endeavor was of native origin, and although fostered at the beginning by foreign experts whose assistance was sought by the Government, it soon passed almost completely under native direction; hence, the new order of education was assimilated without violent disturbance of old ideas and institutions, and derived support from the principles of patriotism and reverential regard for imperial authority which the old education had imparted. For the reason also that modern education in Japan is essentially scientific, there was no clash between it and the traditional ethical or religious teachings; nor has there been any attempt to substitute European classics for the oriental in the higher schools; so that modern education appears as an offshoot from the old root, an indigenous growth rather than an exotic.

The system of public education is as thoroughly organized as the French system, and is more completely unified than the latter, since

not only all institutions for general education, but also industrial and technical schools are included in the province of the ministry of public instruction.

PRIMARY EDUCATION.

As regards primary education, the salient features of the system are the completeness of the school census, the efficient inspection service, and the large provision for the training of teachers. From these conditions it follows that year by year close watch is kept over the movement of the school population; close relations are established between individual schools and the central authority; and the teachers have a recognized professional standing.

Statistics for 1910–11, the latest published, show that 98 per cent of all the children of school age (6 to 14) had followed or were following the prescribed course of instruction. The compulsory law provides that all children must attend school six years of the eight covered by the legal school period. As kindergartens are specially recognized in the system of Japan, a large part of the children are also under supervision from the ages of 3 to 6 years.

The elementary schools are classified as ordinary and higher, the former covering the six years of compulsory school attendance; supplementary classes may be maintained in connection with schools of either division for pupils who for any reason have been unable to complete the course of study in regular grade. The following table comprises salient particulars respecting the elementary schools:

Number of Government, public, and private elementary schools, and of teachers, pupils, etc., for 1910–11.

Schools.	Number of schools.	Teachers.	Pupils.	Completed prescribed course of instruction.	Those admitted during the year.	Daily attendance.		Teachers per school.	Pupils per teacher.
						Average.	Percentage.		
Public elementary schools	25,673	150,377	6,795,809	932,628	1,498,622	6,323,210	92.57	5.86	45.19
Private elementary schools	166	723	31,202	3,530	7,815	29,122	93.03	4.36	43.16
Elementary schools attached to higher normal schools and higher normal schools for girls	3	63	1,662	246	281	1,585	96.18	21.00	26.38
Elementary schools attached to Fu or Ken normal schools	68	848	33,045	5,971	8,078	21,828	95.88	12.47	38.97
Total	25,910	152,011	6,861,718	942,375	1,514,796	6,385,745	92.59	5.87	45.14
1909–10	26,084	144,506	6,473,592	728,702	1,496,798	6,014,787	92.54	5.54	44.80
1908–9	26,386	134,337	5,996,139	470,210	1,447,054	5,581,522	92.67	5.09	44.64
1907–8	27,125	122,038	5,713,698	1,148,847	1,684,807	5,276,113	92.04	4.50	46.82
1906–7	27,269	116,070	5,514,735	1,037,484	1,686,447	5,043,180	91.34	4.26	47.51

Every city, town, or village is obliged to establish and maintain elementary schools with sufficient accommodations for the children of school age within their respective areas. Teachers are appointed by local authorities from candidates who have submitted to the required tests and secured a license. These tests are conducted according to two methods, viz, without examination and by examination. The tests by examination are held at least once in each year, while the tests without examination are held at any time, as occasion may require.

The license is granted by the governors of *Fu* or *Ken* (Provinces) to those who have been successful in the test for elementary-school teachers, or to graduates of schools approved by the minister of state for education, or graduates of normal schools. The validity of this license is restricted to the *Fu* or *Ken* where they have been granted.

The governors of the Fu or Ken, who are appointed by the Emperor, are responsible for the educational affairs of their jurisdictions, but in each of these divisions and also in the subdivisions (guns) the minister of education is represented by inspectors selected by examination. These officials report directly to the central authority.

The support of elementary schools is derived largely from local revenues, but the contributions from the State have been recently increased.

As regards the course of study and the internal conduct of the schools, the local authorities are guided by official instructions; these are chiefly advisory, but in respect to a few matters are mandatory. Thus the textbooks and charts for elementary schools, which relate to morals, the Japanese language, arithmetic, Japanese history, geography, science, and drawing, must be publications the copyright of which is held by the department. As to other textbooks, they may be works either copyrighted by the department of education, or examined and approved by the minister, and the local governors have the right of choosing from among them.

Special stress is placed upon school hygiene, and medical inspection is maintained over all schools under the immediate control of the department of education and over the public schools of the Provinces. The report for 1911–12 states that:

> In all Fu and Ken they began to take pains as to measures for school hygiene and to pay attention to gymnastics, exercise, sport, etc., of children and pupils. At the same time meetings of school physicians were called, that they might discuss and investigate all matters relating to school hygiene—or give lectures on health to the parents and relatives of pupils—and children, and, in union with the efforts of the parents and relatives in the homes, they expected to produce good, substantial effects. As regards educational societies, educational exhibitions, etc., subjects relating to school hygiene and materials of hygiene were gradually increasing. Especially close attention was paid to trachoma and other contagious diseases, and if a case broke out no time was lost for its prevention and disinfection, so that the disease might

not spread. It is a circumstance for great congratulation that honor has been conferred on meritorious physicians.

The number of public schools in which school physicians are engaged included 12,957 elementary schools, 80 normal schools, 242 middle schools, 144 high schools for girls, 3 special schools, 494 technical schools, 31 miscellaneous schools, and 2 blind and dumb schools, the total being 13,953. Compared with the previous year, this shows an increase of 1,199 elementary schools, 2 normal schools, 1 middle school, 12 high schools for girls, 1 special school, 72 technical schools, and 6 miscellaneous schools, the total increase being 1,293.

The elementary schools and supplementary technical schools, in some localities, were ill provided with good physicians, and in some places one physician had a number of schools under his charge. The only schools which had no physicians of their own were chiefly village elementary schools, or town elementary schools of some towns whose inhabitants are less than 5,000, and all of them were under some special conditions which did not allow them to engage physicians. This is allowable, because the ordinance relating to school physicians stated that the local government may permit elementary-school authorities to postpone the employment of physicians if circumstances do not enable them to do so.

The percentage of elementary schools which engaged their own school physicians was 61. Compared with the previous year there was an increase of 7, and compared with five years ago the increase was 20. The rate has thus gone on increasing, but even now the proportion goes only a little ahead of three-fifths, which means that more attention on this point is requisite.

SECONDARY AND HIGHER EDUCATION.

In the establishment and organization of schools of the different elementary grades, two purposes are emphasized, namely, that of proportioning the number of institutions to the actual needs of localities, and that of adjusting them to the wants of different classes of students.

In his report for 1910–11,[1] the minister of education says, with reference to secondary education:

> Its advancement and development were undertaken in proper ratio to the development and propagation of elementary education. The stress was put on the inner improvements of education, and care was given to discipline, no less than to instruction, so that healthy thought and sincere character might be fostered. On one hand, careful selection of good, efficient directors and teachers was made, while, on the other, nonqualified teachers were gradually decreased in number.

With respect to special schools the minister continues:

> The number of special schools newly established every year is very small compared with that of other kinds of schools, because the very nature of a special school makes it unnecessary for every prefecture to have one or more schools of this kind. But those already established, realizing the rapid advancement of the time, were more and more trying to catch up with it by turning out good fruit of their investigation in art and science and of the development thereof. They also paid attention to the completion of equipment and stability of their foundations, no less than to the improvement of the teaching staff and its work, as well as to the increase of the pupils and to the formation in them of sincere character, so as to produce graduates who can meet the future demand of the nation.

[1] Published in 1913.

The secondary and special schools are maintained by local appropriations, students' fees, and subscriptions. They are regulated as to studies and equipment by official orders, and they are all subject to Government inspection, scholastic and medical.

In view of an apparent deterioration in the health and physique of students, an investigation was ordered by the minister during the current year for the purpose of determining the effect of the discipline and the studies of the secondary and special schools, and the means to be adopted for promoting health and physical development of students both in the young men and young women.

STUDENTS IN FOREIGN COUNTRIES.

One of the most noticeable facts in the record of higher education is the selection of students who are sent abroad to complete their studies under the direct control of the education department. During 1912 the number of such students was 34, who were assigned to England, Germany, France, and the United States. In several instances the student was expected to study in the universities of several countries before his return to Japan.

EXPENDITURE FOR PUBLIC EDUCATION.

The following table shows the expenditure for public schools established by the authorities of Provinces and cantons (guns), cities, towns, and villages, and the distribution according to classes of schools and institutions:

Expenditures for public schools.

Classes of schools.	Expenditure.		
	Ordinary.	Extraordinary.	Total.
	Yen.[1]	*Yen.*	*Yen.*
Elementary schools	41,883,116	14,375,243	56,258,359
Normal schools	3,291,780	1,023,748	4,315,528
Middle schools	4,159,953	519,665	4,679,618
High schools for girls	1,480,881	602,026	2,082,907
Special schools	669,018	195,880	864,898
Technical schools	4,301,978	1,507,452	5,809,430
Blind and dumb schools	29,246	170	29,416
Miscellaneous schools	195,505	9,629	205,134
Kindergartens	148,760	68,808	217,568
Libraries	128,248	15,631	143,879
Others	758,132	1,271,574	2,029,706
Grand total	57,046,617	19,589,826	76,636,443
United States equivalent	$28,409,215	$9,755,734	$38,164,949

[1] Exchange value of a yen is 49.8 cents.

In addition to the expenditure covered by the above table, the expenses of the education department amounted the same year to 9,009,556 yen, equivalent to $4,486,759. Of this amount, 4,869,628 yen were appropriated for the 3 universities.

SIAM.

The administration of public affairs in Siam is organized after European models, and the King's cabinet includes a minister of public instruction and ecclesiastical affairs who has charge of schools for general education. Technical schools are committed to ministries relating to their specialties. Thus the ministry of lands and agriculture maintains an agricultural college. Elementary training in rural industries is fostered by the work of the settlement commission, created in 1901 to decide on the ownership of lands, a work which has brought about the allotment and settlement of the richest agricultural lands of the Kingdom. Other forms of technical education are provided for by the local schools and by a system of scholarships which are awarded to young men of great promise who pursue their studies in foreign schools of mining, engineering, etc., in preparation for directive service in their own country.

The success of the royal Government in the endeavor to promote elementary education is largely due to the support of the Buddhist priests, who are trained for teaching in a Government normal school, and are thus prepared to impart the elements of secular knowledge in the monastery schools which are utilized for that purpose.

According to statistics for 1911–12, there were at the capital, Bangkok, the following Government schools: 138 primary schools, with 10,100 pupils; 4 higher primary schools, with 420 pupils; 2 secondary schools, with 184 pupils, and 6 English schools, with 549 pupils. The nucleus of a university existed in a medical college, with over 100 students, a training college for teachers, and a civil service college, and plans had been formed for organizing a complete university comprising faculties of law, medicine, engineering, agriculture, commerce, and pedagogy.

MODERN EDUCATION IN CHINA.

The origin and development of the movement for modern education in China are very fully set forth in a bulletin of this office which brings the account through the year 1910.[1] It is not the purpose here to review this history, but certain particulars respecting the organization of the system of modern education in accordance with Government decrees is necessary to a clear understanding of additional information derived from official sources.

The military necessities of the Empire and the remarkable activity of missionary societies in China prepared the way for the general movement, which derived its impetus from the decree of September 5, 1905. This decree abolished the system of examinations which

[1] King, Harry Edwin. The educational system of China as recently reconstructed, Bulletin No. 15, 1911.

for ages had determined the access to all official careers in China. Provision for western learning became a matter of public effort in all the chief centers of China. By a decree of December 6, 1905, a ministry of education was instituted and formal organization given to the new system. This organization followed in important particulars the model furnished by the system of Japan. The main features of the system are the concentration of authority in the minister or president; the constitution of separate departments in the ministry to deal with different interests of the system; the provision of Government inspectors charged to report on the condition of schools in all the Provinces; the constitution of provincial boards of education, the members of which are appointed by the ministry, and the appointment in each Province of a commissioner of education, who reports directly to the central authority.

The classes of schools authorized in the new system were primary (including kindergarten), normal schools, middle schools, and colleges. The establishment of an Imperial University at Pekin was decreed, and authority was also given to the Provinces to establish universities within their respective areas.

The Republic of China was declared in February, 1912, and education was one of the most prominent subjects that engaged the attention of the provisional Government then formed; the modern system as organized by imperial decree was adopted, and is still maintained with only slight modifications of its main features.

For the understanding of present conditions, it is necessary to keep in mind the vast extent of the country, which covers an area of more than 1,500,000 square miles, with population variously estimated from 270,000,000 to 312,000,000. For local government the Republic is organized into 18 Provinces, besides those in Manchuria and other dependencies.

A report received from T. D. Cheshire, Esq., American consul general at Canton, contains a translation of a series of decrees which were issued by the minister of education in the fall of 1912, and which provide minute regulations for the conduct of all classes of schools included in the system. The extent of these orders precludes their repetition here. It is, however, of special interest to note the directions pertaining to technical schools, since these relate more particularly than any other class of institutions to the development of China as a modern nation. The order relating to these schools is as follows:

ORDER OF THE MINISTRY OF EDUCATION RELATING TO TECHNICAL SCHOOLS.

ARTICLE 1. The object of the technical schools shall be to confer a high grade of technical knowledge and to develop expert talent.

ART. 2. The different kinds of technical schools shall be: Law schools, medical schools, schools of pharmacy, agricultural schools, industrial schools, commercial schools, art schools, schools of music, mercantile schools, and schools of languages.

ART. 3. Technical schools founded by the Central Government shall be under the direction of the ministry of education.

ART. 4. If a locality has a surplus remaining after establishing the schools required, it may, according to the provisions of this order, establish in addition a technical school, to be called a Publicly Founded Technical School.

ART. 5. A private person or a private association may, in accordance with the provisions of this order, collect funds and establish a technical school to be called a Privately Founded Technical School.

ART. 6. The founding, alteration, or abolishing of publicly or privately founded technical schools must be reported to the minister of education for his approval.

ART. 7. The requirements for entrance into a technical school shall be graduation from a middle school or the passing of an examination showing equivalent standard.

ART. 8. A technical school will have a preparatory department and a department of discussion and criticism.

ART. 9. The length of the school year and the subjects to be studied in the technical schools will be determined by separate regulations.

ART. 10. The qualifications of teachers of technical schools will be determined by separate regulations.

ART. 11. Publicly and privately founded technical schools which do not conform to the provisions of this order may not take the name of "technical schools."

ART. 12. This order shall take effect from the date of promulgation.

October 22, First Year of the Republic.

Sixteenth Order of the Ministry of Education.

Subsequent orders give minute regulations respecting each one of the classes of technical schools named in the second article.

Peculiar interest attaches also to the order providing for the unification of the spoken language as here cited:

ORDER OF THE MINISTRY OF EDUCATION RELATING TO THE UNIFICATION OF THE SPOKEN LANGUAGE.

ARTICLE 1. In obedience to the seventh clause of article 8 of the executive order relating to the duties of officials, the minister of education will call an assembly for the special purpose of discussing ways and means of making uniform the spoken language.

ART. 2. The assembly will meet under the auspices of the minister of education. The opening date will be February 15, 1913.

ART. 3. The assembly will be composed of the following members:

1. Members invited by the minister of education, whose number will not be fixed.

2. Geographical representatives as follows: Two from each Province to be appointed by the minister of education; one each from Mongolia and Tibet to be appointed by the representatives of Mongolia and Tibet at the capital; one from the Chinese population resident abroad to be appointed by the Society of Chinese Resident Abroad.

ART. 4. The qualifications for membership will be as follows:

1. Profound knowledge of the spoken language.

2. Proficiency in elementary studies.

3. A reading knowledge of one or more foreign languages.

4. Familiarity with many local dialects.

A person possessing any one of the above qualifications will be eligible for membership.

ART. 5. The task which the assembly will take up will be:

1. Out of the various forms of pronunciation to fix upon one as the national pronunciation.

2. For every sound in the national pronunciation so fixed to determine the most convenient and best.

3. To select a root character for each sound and to classify all sounds according to these roots.

ART. 6. Members selected by the minister of education will be chosen from the list of persons conforming to the above standard, who are of his own Province, and also from a list of persons of his own Province who reside at Peking, Tientsin, or other places near at hand.

ART. 7. Traveling and lodging expenses will be defrayed, according to circumstances, by the minister of education, in the case of invited members, by their constituencies in the case of elected members.

ART. 8. The subjects for deliberation will be fixed in detail after the opening of the assembly.

FAN YUAN-LIEN,
Minister of Education.

December 2, First Year of the Republic.

EDUCATION IN THE PROVINCE OF KWANGTUNG.

The translation of these orders is accompanied by the following statement pertaining to the Province of Kwangtung:

Regarding the manner in which the new regulations are being enforced in the Province of Kwangtung, an interview was held with Mr. Chung Jung-kuang, the provincial commissioner of education. This gentleman has for many years occupied the position of dean of the Canton Christian College, one of the leading educational institutions of this Province, and is therefore well qualified for his present responsible post. He stated that the educational affairs of the Province had not since the revolution been completely reorganized. Many of the local primary schools, as well as private schools, had not yet been brought under the governmental scheme, but a thorough inspection of all the schools was soon to be made and it was hoped that matters would soon become more systematized.

So far each district, of which there are 94, is required to maintain one model lower primary and one model higher primary school. More may be founded later, but this has been made the necessary minimum.

In apportioning middle schools the Province has been divided into 14 divisions, and one middle school assigned to each.

Next above the middle schools come the universities, of which, under the new system, one each is to be established at Peking, Wuchow, Nanking, and Canton. No university, however, has ever existed at Canton, nor does it seem probable that one will be founded for three years to come at least. Such a thing is doubtless financially out of the question at this time, and, furthermore, the need for a university is possibly less here than in any other part of the country, because of the proportionately large number of students from Kwangtung who obtain their university training abroad. Though not equipped with a university, the Province boasts of a higher normal school, whose fine buildings were erected a few years ago on the site of the old Canton examination hall. There is also a law school, an agricultural school of medium standard, and a commercial school of higher grade. Certain Government schools, notably the Industrial School and the School of Languages, which were in operation before the revolution, have not yet been reopened. In addition, there are many private schools founded both by Chinese subjects and by foreign missionary societies, of which it is hoped that many may be incorporated under the governmental system. For example, in Canton there are three medical schools, a school of pharmacy, a sectarian middle school (the Canton Christian College), as well as institutions carried on by American missionary societies. Mr. Chung stated that he hoped by the end of the summer to have a large number of private institutions, as well as the schools organized by local communities, brought under the control of the Government.

The Canton Christian College, mentioned in the above statement, is an undenominational institution under the general management of trustees, incorporated in the State of New York. It is supported by voluntary subscriptions, which for the 10 years of the existence of the college have amounted to $155,916. Of this amount about $23,000 was contributed by the Chinese, to be applied to the erection of dormitories on the college grounds. In their report for 1911 the trustees of the college urged the importance of appropriations amounting to at least $100,000 for the immediate uses of the institution.

EDUCATION IN AMOY.[1]

Education in Amoy, a treaty port in the Province of Fukien, may fairly be divided into four well-defined groups: (1) The Government schools, new style; (2) the old-style Chinese schools; (3) mission educational enterprises; and (4) two secular schools under foreign management, one for boys and one for girls, supported by Chinese.

1. *Government schools.*—The Government schools in this city, five in number, are all open for boys only. So far there are no Government schools for girls. The Government middle school, the most important of those mentioned, has a course of study conforming to that prescribed for all Government schools of its class. It includes Chinese history, Chinese literature (classics), Chinese geography, morals, mathematics (arithmetic and algebra), English, and physical culture (including military drill), elements of physics, chemistry and geology, Chinese penmanship, and Chinese composition. It is difficult to determine just how much of this work is brought to a high standard, but from evidence given by the "graduates" of this school it must be admitted that few of its students obtain a thorough grounding in elemental principles of the subjects offered. Generally speaking, it may be said that the standard of instruction is low.

It is difficult to have pupils stay in the schools sufficiently long to reach the higher grades. It is still more difficult to have many remain in school if the standard of examinations is placed high. It would be safe to say that the majority of pupils matriculated drop out of schools before having acquired any large degree of proficiency, and the pupil who stays to complete his course in a thorough manner is a rare exception.

The Amoy Government middle school derives its support from the old fund used for the maintenance of the old examination halls. This fund comes from interest on old subscriptions, some lands, the rental of which is used for the schools and the rental from houses owned by the school. The gentry also give money for its support which is managed by a board of trustees elected from the gentry. While it is not possible to say definitely that no money comes to Amoy from the amount allotted to education in the Province, yet, it is confidently asserted by persons in Amoy, that of the entire $400,000 allotted to the Government schools for the Province of Fukien, none reaches this city. This is stated to be the cause for its backwardness in educational development.

In Foochow, it is stated, $400,000 local currency ($200,000 gold) a year is allotted to the commissioner of education for the maintenance of the schools. This amount is derived from various forms of taxation, but just what taxes are collected for education it is impossible to say. It is known, however, that they include certain court fines.

In Amoy a tax was levied on the exportation of narcissus bulbs, part of which was to be devoted to schools, while a portion of the taxes on the lottery monopoly was also to be used for the maintenance of the public schools. The attempt to collect this tax

[1] From statement furnished by Mr. Charles F. Brissel, vice consul in charge.

met with opposition, for it was asserted that the money would not be used for education, hence it was merely a means of increasing taxation without producing a benefit for those taxed. The remaining four of the Government schools mentioned above are supposed to derive their support from these taxes, but in many cases the main function of the principal of the schools is to obtain the necessary financial support either from public donations or from his wealthy friends whom he may be able to interest. Before the institution of the new-style school, the president of a school was always required to be a scholar of more than ordinary ability, and in many cases he was wealthy and with his own personal wealth met the expenses of the school, but if he were not wealthy, its support was usually provided by a board of trustees.

The Amoy Government middle school has large, well-kept premises, being those formerly devoted to the halls for the old-style examinations. The buildings are located just within the north gate; that is, inside the old city wall of the original city of Amoy. The school has 180 pupils, ranging in ages from 8 to 20. There are 36 recitation hours a week. The school hours are from 9 until 12 and from 2 until 5. The teaching staff is composed of a superintendent called a Chu-jen, a second degree man, said in the old style to correspond to the M. A. degree; 5 Sui-Chai, first degree men, old style said to correspond to the B. A.; 1 graduate from the Foochow Normal School and 1 graduate from the Tung Wen Institute in Amoy.

The buildings and grounds are very favorably situated, but are much unlike western school premises. No one building is large; all are one-story and are so arranged about a quadrangle as to form what might be called a small park. In these buildings there are some modern chairs and aids in teaching, but the equipment is very meager and not of great value. It is estimated to be worth $250 gold. The annual expenses are about $4,500 gold.

A school of much the same type is the Amoy Public Middle School. This school has two divisions, the elementary and the advanced. While these are called "public schools," it must be remembered that tuition in them costs about $12 gold a year (the same charges in practically all the schools, more than mission schools, but the same as the Tung Wen Institute), and the scholars must buy their own books and supplies. There is no such thing as a real public school conducted on the lines of the public schools of New York City. The Amoy Public Middle School is located in the section of Amoy city called Wei Ching and has about 200 students. It has 12 instructors, 2 from the Tung Wen Institute and most of the remainder from the Foochow Normal School. The three remaining schools of the Government class are extremely elementary.

2. *Old-style Chinese schools.*—The old-style Chinese schools at Amoy are practically the same as in other parts of China. The teachers are usually very poorly paid, the instruction is given in a very unwestern way, the pupils study out loud and attend as little as possible. There are not more than 30 in one school, and at times only 3 or 4 are in attendance. There is usually but one instructor. These schools are poorly housed and make no pretense at giving modern instruction.

3. *Mission educational enterprises.*—All of the missions (American—Reformed Church in America; British—The London Mission Society; the English Presbyterian) maintain educational enterprises in the various portions of this district. The courses in these schools are not very advanced, and some of the schools are not graded. It must be remembered that in most of the cities and towns where the mission schools exist there are no native schools excepting the old-style schools.

In some of these mission schools there are kindergartens. One of these kindergartens has about 100 children whose ages range from 4 to 10. They all pay, and their fees are sufficient to meet the running expenses of the school, which has been self-supporting for 10 years. The pupils come from all classes, but usually not from the more wealthy. They learn to read and write in the romanized Chinese of this district and in Chinese character, as well as study arithmetic, drawing, object and

nature study. The teachers are all girls who have had a good education in the mission girls' schools and who give their services for the nominal salary of $1 gold a month to enable them to be trained as kindergarten teachers. Ten such girls, so trained, are now out teaching kindergartens, some getting very good salaries, being paid by native churches.

In Amoy the English Presbyterian Mission and the American Mission maintain large schools for girls, while the three missions unite in maintaining the Union Middle School for boys. This middle school was established in 1881, and now has 64 boys. The school comprises an advanced grade, but owing to the difficulties of language (the boys are taught English as a subject and not taught in English), modern English textbooks are not used. The annual cost of maintenance is about $1,500 in gold, not including the salary of the foreigner who directs the school.

Among other missionary schools should be mentioned the Anglo-Chinese College at Amoy, a British institution for boys who are supposed to have completed the course in the Union Middle School and two schools of the American Mission, which receive both boys and girls and include in their course of instruction manual training for boys and household industries for girls. Scattered throughout the district the missions have many schools attached to their churches and chapels; it is noticeable that the Chinese Christians contribute to the support of these mission institutions.

4. *Secular schools under foreign management.*—The fourth class of schools includes the Amoy Girls' High School and the Tung Wen Institute. The school for girls is maintained by the Chinese and is attended by those girls who are willing to pay more than is required at the mission schools. The tuition is $15 a year, in addition to which the pupils must provide their own books and supplies. There are about 40 girls in attendance, the larger proportion being day pupils. The name "high school" does not accurately define the status of the school. It teaches practically all grades, and on occasion will teach French and German.

The Tung Wen Institute is an efficient and progressive school. Its former students and graduates are found in a large number of the better-paid positions of the city, conspicuously in the customhouse, the post office, and the consulates, where they act as translators and interpreters. The school was established in 1899 by the Chinese, with the assistance of the then American consul, Mr. A. Burlingame Johnson. Since its establishment a fine building, costing $15,000 gold (a large sum for this part of China), has been erected. The building and grounds at the present time are conservatively estimated to be worth $25,000 gold. Through the efforts of Mr. Julean H. Arnold, recently consul at Amoy, an endowment fund of $25,000 gold was raised by the Chinese, the trustees, and friends of the institute. This is one of the few, if not the only, educational institution in China conducted on these lines, and it is a conspicuous success.

The attendance during last year was 268. There are two foreign instructors (the superintendent and the assistant superintendent) and seven Chinese instructors who teach in English. There is one Chinese teacher of Mandarin and two Chinese teachers of the local dialect. This school teaches no religion and has among its students Christians, both Protestants and Catholics, and boys from families adhering to Chinese religions. The chief function of the school is to prepare for business and teaching, and, as previously noted, many of its former students and graduates are employed in public offices and there are many in the local business offices. In the city schools, as they were conducted prior to the revolution, many of the teachers were students of Tung Wen. This school at the present time is progressing splendidly and is a credit to the superintendent, Mr. C. J. Weed, who has conducted it since its

establishment. Associated with Mr. Weed, who is an American, are a number of Chinese gentlemen, and it is largely due to their liberal support, both with their personal influence and their annual gratuities, as well as their contributions to the endowment fund, that this achievement has been made possible.

A GOVERNMENT COLLEGE.

Special interest attaches to the Tsing Hua College, which is an outcome of the Indemnity Fund returned to the Chinese Government by the United States, amounting to $10,785,286. In consequence of the action of Congress to this effect the Government of China decided to send yearly a considerable number of students to the United States for their education, and as a means of preparing students to profit by the opportunity for advanced study in America thus offered, the Tsing Hua College was organized and began its work in the spring of 1912. The college is under an administrative board, of which the president is Mr. Tsur Yetsung, an A. B. of Yale University and M. A. of the University of Wisconsin. The college is organized in two departments, namely the Chinese department and the Western department. The president of the board of administration is dean of both departments. The professors in the Chinese department are all natives of China. The professors of the Western departments are, with few exceptions, Americans, and all are graduates of leading institutions of this country. There are also assistant instructors, who are graduates either of Pekin University or of mission institutions of high grade in China.

AN INTERNATIONAL ENTERPRISE.

The International Institute of China was established at Shanghai about 20 years ago for the purpose of promoting the general welfare of the country, moral, material, and political; and under the new conditions the purposes of the institute assume new importance. The work of the institute is carried on under four sections: Commercial, educational, religious, and the woman's section. The funds for its support are derived from private sources. The director in chief is Dr. Gilbert Reid, who is assisted by an executive committee, comprising both native and foreign members of distinction. The institute has been successful in exciting interest and support among the higher classes in China.

INDIA.

THE NEW GOVERNMENT POLICY.

The new Government policy with respect to education in India, announced on the occasion of the Delhi "durbar," December 12, 1911, has been defined by the issue of a resolution which appeared in the Gazette of India, February 22, 1913.

In its preliminary statement this document comprises a review of education since the date of Lord Curzon's well-known resolution of 1904, and while noting the great advance made and the improvements effected in all departments of educational activity it draws attention to the serious problems that yet remain to be solved. The most pressing of these problems is declared to be the formation of character. The Government, therefore, while maintaining an attitude of strict religious neutrality, expresses deep interest in the experiments in moral education that are now going on in various parts of the country. Closely allied to these efforts is the creation of circumstances that tend to moral purity, and in this respect the Government has assumed direct responsibility by arrangements for the supply of residential accommodations, "hostels," for pupils in high schools and colleges, thereby making sure that the young student residents shall be under the influence of persons of character entrusted with the care of their health and moral well-being.

In elaborating the principles of primary education the Government of India has made it clear that a system of free compulsory education is contemplated, but for financial and administrative reasons this purpose can not be immediately realized. The resolution, however, calls for the widest possible extension of primary education and urges "local governments to make provision for free elementary education amongst the poorer and backward classes of the population." The education of girls, which has rapidly advanced during the last decade, is declared to be a matter demanding continued effort with careful adjustments to existing social conditions.

Discussing the means by which the extension of primary education is to be accomplished, a contemporary journal says:

> Indigenous schools of the old type are also to share in the patronage of the Government. An attempt is to be made to regulate the courses of instruction in rural and urban areas to suit the special requirements of village and town life. Better facilities for the training of teachers and for a periodical refreshment of their educational experiences are other noteworthy features of the scheme. The low financial status occupied by teachers of elementary schools in the country has long been a disgrace to everybody concerned with them. But thanks to the generous and practical sympathy of the present Viceroy, there is to be an appreciable improvement. The gladdening declaration has gone forth: "Trained teachers should receive not less than 12 rupees per month, special rates being given in certain areas. They should be placed in a graded service, and they *should either be eligible for a pension or admitted to a provident fund.*" The message will cheer many an unfortunate soul toiling for the very necessities of life, even when rendering to the community the valuable service of educating its young minds. Vernacular schools are also to be pressed into service to subserve the work of expansion, and there is to be an extension of the benefits of education on a very large scale. It may not be difficult to realize the hope: "It is the desire and hope of the Government of India to see in the not distant future some 91,000 primary public schools added to the 100,000 which already exist for boys and to double the 4,500,000 pupils who now receive instruction in them." The larger use of the services of women

teachers and the securing of continuity in control and inspection are other reforms that have been suggested.

The importance of secondary education, which is the basis of all professional and industrial education in India, is fully recognized in the resolution. At the same time it is announced that so far as possible this will be left, as heretofore, to private enterprise. The action of the Government in this field will be directed to improving the quality of the instruction and the raising of standards. For this purpose it is proposed:

(1) To employ in the few existing Government schools only graduates or trained teachers; introduce a graded service for their teachers, with a minimum salary of 40 rupees ($13) a month, or a maximum salary of 400 rupees ($130) a month; to provide proper hostel accommodations; and to introduce a school course complete in itself, with a staff sufficient for teaching the "modern side"; introduce manual training and improve science teaching.

(2) To increase the grant-in-aid for private institutions in order that they may keep pace with the improvements in the Government schools in the directions above indicated, and encourage the establishment of new aided institutions where necessary.

(3) Multiply and improve training colleges, so that the supply of qualified teachers for secondary schools may be fully equal to the demand.

(4) Found new Government schools in localities in which this action is eminently desirable.

The importance of technical and professional institutions of all kinds is emphasized in the resolution, and the purpose declared of remodeling them so as to bring them closer to Indian needs and conditions. In particular, it is promised that an effort will be made "to bridge over the gulf between the artistic traditions of the nation and the exotic elements that have been introduced into the art schools."

The first step in this reform will be that of preserving for and in India "scientifically arranged collections of the products of its ancient and modern arts and crafts." Specific recommendations respecting both technical and university education are deferred until Government inquiries now in progress are completed, but assurance is given that in both fields future advance will be directed with constant regard to the wants of India. Encouragement for oriental studies and the institution of an oriental college at Delhi are promised, the special colleges for chiefs are to be improved, and in view of the awakened interest of the Mohammedan communities in modern education liberal provision is to be made for them under conditions adjusted to their requirements.

The spirit which animates the resolution is shown by the closing appeal to the Indian public here cited:

The Governor General in Council trusts that the growing section of the Indian public which is interested in education will join in establishing under the guidance and with the help of Government those quickening systems of education on which the best minds in India are now converging and on which the prospects of the rising generation depend. He appeals with confidence to wealthy citizens throughout India

to give of their abundance to the cause of education; in the foundation of scholarships, the building of hostels, schools, colleges, laboratories, gymnasia, swimming baths, the provision of playgrounds and other structural improvements, in furthering the cause of modern scientific studies and especially of technical education, in gifts of prizes and equipment, the endowment of chairs and fellowships, and the provision for research of every kind. There is a wide field and a noble opportunity for the exercise on modern lines of that charity and benevolence for which India has been renowned from ancient times.

It is not expected that the large plans set forth in the resolution will be realized in a brief time, but already the announcement, supported as it is by the increased grants from the public treasury amounting to 50 lakhs of rupees ($1,620,000) for popular education and an extra grant of 10 lakhs ($324,000) for higher education, has stimulated the provincial governments to renewed efforts. All authorities and observers are agreed as to this activity, the results of which are not yet measurable. The features of the year's record are summed up by the joint secretary to the Government of India, as follows:

The collection of materials for the preparation of extensive schemes for the spread of elementary education, and, in certain Provinces, for the improvement of secondary education; the growth of new ideas regarding university teaching, which has resulted in the proposal for a teaching and residential university at Dacca; the generous gift of Sir T. N. Palit to the University of Calcutta; the creation of a department of industries at Madras as a portion of the scheme of industrial training and development; the sanctioning of an industrial scheme for the central Provinces; an inquiry carried out by Col. Atkinson and Mr. Dawson into the question of bringing technical institutions into closer touch with the employers of labor; the institution of proposals for an Oriental Research Institute; and the conference held in July, 1912, on the education of the domiciled community, whose interests have not been overlooked in the distribution of imperial grants.[1]

CHANGING ATTITUDE OF THE MOHAMMEDANS.

One of the chief problems confronting the educational authorities in India arises from the attitude of the Mohammedans. Every commission has urged as a matter of great consequence efforts to secure the confidence of this people and to foster their interest in modern education. A change in the attitude of the leading Moslems was noticeable in the closing years of the nineteenth century and is attributed largely to the influence of the late Sir Syed Ahmad Khan. At first this influence was confined to the upper and middle classes, but it has gradually filtered down to the masses. This explains the fact that in the last nine years the number of Moslem pupils attending modern schools has increased by about 50 per cent and represents over 16.7 per cent of the children of that community of school-going age, a proportion slightly in excess of the average for the children of

[1] Bombay Government Gazette, Apr. 10, 1913.

all the races and grades. In higher education, however, the number of Moslems under instruction is below the general average.

For the purpose of promoting this movement the Government of India has issued a circular letter to the local governments on the subject.

REVIVALS IN LITERATURE AND ART.

One of the most interesting outcomes of British administration in India is the revival of literary interests in Bengal. Reference is not here made to the journalistic output, but to a true literary activity. A well-known authority on development in India says of this revival:

> The word "renaissance," which I have already used, most nearly describes the period through which Bengal has been passing during the last century. There has come to pass under British rule a true rebirth of an ancient culture and civilization. The course taken has been more complex than that experienced by Europe in the sixteenth century—it has been a double instead of a single process—but the resultant has been the same. The Greek and Latin culture, which lay behind the European movement, was itself an indigenous European product. The Indian renaissance, on the other hand, was ushered in at first by a wholly foreign culture—the western learning. But fortunately, or, as I should prefer to call it, providentially, this was but the beginning of the process, not the end. The second and far greater stage—the Indian renaissance stage proper—was reached when, owing to the impact of a foreign culture, the classical literature of India itself, and the ideals of civilization which it contained, began to be revalued and recovered. This was the true renaissance movement, corresponding most closely with that of Europe. It is the working out of this greater impulse which we are witnessing on all sides to-day.[1]

The development has been emphasized by the recent bestowal of the Nobel prize upon Tagore, whose poems seem to have inspired the article cited.

Closely related to this literary renaissance is the interest in the revival of Indian art and craftsmanship, which was strongly advocated by Lord Curzon while Governor General of India, and has been urged by many Englishmen familiar with life and customs in that Empire. Conspicuous among these is Maj. J. B. Keith, formerly of the Indian Archaeological Survey, who has contributed important studies of Indian art and architecture to the Dawn, the organ of a society for promoting native interests. The London Morning Post finds the text for a recent article on the subject in a significant sentence quoted from another authority on the Indian situation. The passage which opens up the economic bearings of the subject is as follows:

> Every new outlet for artistic employment opened, or old one made wider, is a guaranty for law and order. Every good handicraftsman forced into menial labor or quill-driving is not only a loss to Indian revenues, but a direct contribution to the elements of sedition and discontent.

[1] Andrews, C. F. Tagore and the renaissance in Bengal. The Contemporary Review. New York City. June, 1913.

The London Post, in indorsing this sentiment, says:

Labor is the law of life, and never till the crack of doom will a nation's life be other than happy so long as its labor is of the kind which exercises the lower rather than the higher instincts in men's character.[1]

STATISTICAL SUMMARY.

The quinquennial report now in preparation will cover the period 1907–1912. The following table comprises the latest statistics published which pertain to the year 1910–11:

Summary of educational statistics of India: 1910–11.

Classes of institutions.	Institutions.			Scholars.		
	For males.	For females.	Total.	Males.	Females.	Total.
Public institutions:						
Higher education—						
Professional colleges	46	3	49	6,267	130	6,397
Art colleges	129	8	137	24,845	244	25,089
Secondary education	5,886	660	6,546	822,712	81,638	904,350
Primary education	108,188	12,037	120,225	3,937,906	689,800	4,627,706
Special education—						
Training schools for teachers	470	83	553	10,545	1,588	12,133
Commercial, agricultural, etc	4,773	499	5,272	133,066	20,919	153,985
Total public	119,492	13,290	132,782	4,935,341	794,319	5,729,660
Private institutions:						
Advanced	2,750	22	2,772	50,627	1,929	52,556
Elementary	35,159	1,765	36,924	503,045	69,399	572,444
Total private	37,909	1,787	39,696	553,672	71,328	625,000
Grand total	.....	.....	172,478	.....	.....	6,354,660

AFRICA.

THE FRENCH COLONIES.

The French Government was the first to enter seriously upon the work of establishing modern schools in northern Africa, and the experience gained in Algeria has determined the educational policy in the other French possessions. To insure stable government, great attention is paid to the details of administration, native regiments are formed and drilled under French officers, and native police assigned to service under close inspection. Thus, a secure basis is prepared for schools and teachers, that from time to time are provided for districts outside the settled towns. In the latter the schools for the French residents and other Europeans are organized in the same way as the public schools of France, but for the natives all orders of missionary schools are encouraged, and from the first the policy was adopted of recognizing the native schools and en-

[1] London Morning Post, June 28, 1913; see also Contemporary Review, June, 1908, article by Mr. Leslie March Phillips.

deavoring gradually to introduce into them modern subjects and a new order of teachers.

Algeria forms an academy in the French university, and so far as Government schools are concerned is thoroughly assimilated to the French system of education. There is a university at Algiers, comprising faculties of law, medicine and pharmacy, science, and letters. In 1912 the professors numbered 102 and the students 1,331. For secondary education there were 3 lycées and 7 colleges for boys with an enrollment of 4,774 students, and 3 lycées and 1 college for girls with 1,383 students.

The modern primary schools were attended by 141,537 pupils in 1911; there were also 226 Mohammedan schools for elementary instruction. Native teachers are trained in modern subjects in the normal schools, which are attended also by French candidates. There are altogether four normal schools for men teachers in the colony, and six normal schools for women teachers. The Government expends for public instruction in the colony nearly nine million francs annually.

In the regency of Tunis the French have been peculiarly successful in bringing Mohammedans into the modern schools; about one-fourth of all the boys who attend the French schools belong to this part of the population.

In the island of Madagascar, which has been a French colony since 1896, a system of education compulsory for children from 8 to 14 is established and has been effectively carried out among the Hora and other tribes of the central districts who are Christianized. The schools for the European population, who number about 12,000 in a total of 3,000,000, are conducted in the same way as the schools of France. For the natives there are above 550 Government schools, with 875 teachers and 54,000 pupils. The Government expends annually nearly $200,000 for education. Mission schools are encouraged, but not aided, by the Government; they are required to follow the official programs, and all children must learn the French language. There is every inducement for so doing, from the fact that natives are largely employed in subordinate positions in the civil and military service.

In their eastern colonies on the continent the French have established many schools, which are exercising a decided influence over the male population; complaint is made that the endeavors to educate the native girls have thus far, with few exceptions, been unsatisfactory.

In French colonies on the west coast less progress has been made in the establishment of schools, but the work has been stimulated since the appointment of an inspector general of education for all the areas on the west coast under French control. The headquarters of this official are at Dakar.

THE ITALIAN AND GERMAN POSSESSIONS.

As a result of the war between Turkey and Italy, Tripoli has come under the sovereignty of the latter country, and the Italian Government has taken active measures to bring its new possessions into the full current of modern life. Special attention has been given to the improvement of conditions in the city of Tripoli as regards administration and sanitation, and the development of public works. Schools have been established, and in all of these a service of medical inspection has been organized and efficiently carried out.

The German Government, which controls possessions on both the west and east coasts of Africa, comprising altogether an area of 931,460 square miles, with an estimated population of 4,500,000, has but recently adopted plans for the education of the natives in these regions.

LIBERIA.

A great impetus has been given to the cause of public education in the Liberian Republic by the recent action of the American Colonization Society. In October, 1912, the society paid over to Ernest Lyon, consul general of Liberia in the United States, the sum of $60,000, being the increment of the fund in trust to be applied to the education of the colored children of Liberia in public schools. The society was organized in 1817 for the administration of an estate donated by Caroline Donovan, of Baltimore, the proceeds in rentals to be used in sending negro immigrants from America to Liberia and settling them in their new homes, with a reversion of the revenues for the education of Liberian children in public schools in case the primary purpose should not exhaust the fund. The decline of emigration has left the fund dormant for some time, and consequently the necessary measures have been taken to carry out the second purpose specified by the donor. The fund goes into the public treasury of the Republic and will be administered through the national legislature, which must pass upon all expenditures of the same. The trust provides a normal revenue of from $3,000 to $4,000 a year.

The continuing income of the original fund will be used for the primary purposes of the society so far as required, and the balance annually turned over to the Government of Liberia.

Primary education is supplied by Government schools, which number 113, and mission schools, of which there are about 90; it has been announced that the new fund will be used to maintain a school on the model of Hampton and Tuskegee.

EGYPT.

Three decades have elapsed since the Khedive signed the decree of January 18, 1883, which abolished the joint control of England and France over affairs in Egypt. At that time an English adviser was appointed whose concurrence is required to give validity to financial decisions. This official has a seat in the council of ministers, but has no executive duties; nevertheless his influence is not limited to his own special province.

During the period of joint control the French were most active in establishing schools chiefly at Cairo, Alexandria, and a few other of the provincial towns. The French schools are still flourishing, but since English influence has been supreme a well-planned system of education has been adopted and is contributing greatly to the transformation which is taking place in governmental activities and social life.

Control of public schools is centralized in the minister of public instruction; Government aid to schools is distributed in proportion to the amount of local support and upon certain conditions relating to the teaching staff and material equipment and the standard which the school maintains. The regulations in these respects so far as they pertain to secondary and higher institutions are determined by standards of European countries, modified by the special conditions of Egypt.

As regards the elementary education of the mass of the people, the Government pursues a plan of great practical utility. From time immemorial indigenous schools have existed called "kuttabs," which were similar to the elementary schools in other Mohammedan countries. In 1897 the minister of education endeavored to bring these schools under Government supervision by offering grants to those that would teach the three R's, using the vernacular language, but following an official course, and would submit to inspection. The Government itself maintains a few "kuttabs," which serve as models for this elementary work. The number of the Government schools increased from 55, with 2,934 pupils (boys 2,547, girls 377), in 1897, to 146 schools, with 15,169 pupils, in 1911. Of the latter total, 9,901 were boys and 5,268 were girls.

The progress in the Government kuttabs is significant, but not more so than that of the private kuttabs—that is, private elementary vernacular schools that have been brought under Government inspection. In 1909–10 the reports showed that 3,582 schools of this class, with 190,875 pupils (174,023 boys, 16,852 girls), were under inspection. Of these schools, 3,054 received grants in aid amounting to $105,000. In 1911–12 the corresponding figures were 3,556 schools; 210,445 pupils (191,687 boys, 18,758 girls); the number of

schools receiving Government grant was 3,279; amount of grant, $110,000.

The ministry has recently created five normal schools for training men teachers and one for women teachers, all preparing to enter into this work; during the current year holiday classes for teachers in the service were conducted at 35 centers.

The latest development in this department is the establishment by the Government of trade schools for carpentry, metal work, etc., at Bulak and Assiut. Private agencies have followed this example, so that trade schools in close relations with the kuttabs are now formed in all the chief centers of population.

Statistics for modern schools and higher institutions, not including the kuttabs, show the following for 1911: Number of students in professional colleges, 1,231, including 28 women; in secondary schools, 2,160 boys; in higher primary schools, 7,709 pupils, including 505 girls; in technical and trade schools, 1,139 boys; in normal schools, schools for household industry, and nurse training schools, 157 girls.

REGULATIONS PERTAINING TO THE PRACTICE OF MEDICINE IN EGYPT.

The following information relative to the requirements for the practice of medicine in all its branches in Egypt has been communicated to the Department of State for the information of Americans who may desire to enter into professional practice in that country. Under date of August 30, 1913, the American vice consul general at Cairo wrote as follows:

In accordance with a khedivial decree, no one is permitted to practice medicine in any of its branches, unless he be the holder of a diploma from a recognized college, and obtains a license to practice from the Egyptian Department of Public Health. This department holds itself as the sole judge as to whether the college which has issued the diploma is "reconnue" (recognized) and that the diploma must carry with it the right to practice in the country from which it emanates.

With regard to the American diploma, it is now provided that a State license to practice must accompany the diploma, and that if the department of public health has any suspicion of the genuineness of these documents, it will require the applicant to obtain their authentication under the seal of the Department of State.

The department of public health has requested that these regulations be brought to the knowledge of American universities in order that their Egyptian students may be informed of the requirements.

During my conversation with the acting director general, he stated that these regulations would not be enforced against the American diploma until after the date of notification to the American colleges, and that the licenses to practice would be given to holders of diploma, from recognized medical colleges, issued prior to that date.

For foreigners the authorization is given upon stamped paper to the value of 30 millièmes (about 15 cents). In the case of foreigners the authorization must be accompanied by a certificate of good character and identification from his consular authorities.

SOUTH AFRICA.

The Union of South Africa, constituted by an act of 1909, effective May 31, 1910, comprises the former self-governing colonies, namely, Cape of Good Hope, Natal, the Transvaal, and the Orange River Colony. The seat of the Government is Pretoria, but the legislature assembles at Cape Town. The governor general of the united colonies is appointed by the British sovereign; a provincial council in each Province legislates on subjects specified in the organizing act and on such other matters as may be delegated to it. Public affairs are administered through executive departments, including a department of education, whose chief bears the title minister of education. The province of the minister at present is limited to the general control of the University of the Cape of Good Hope, the colleges, and the South African school of mines and technology. It was provided in the act of 1909 that for a period of five years, and thereafter until Parliament provides otherwise, education other than the higher should remain under the jurisdiction of the respective provincial councils.

EDUCATION FOR THE EUROPEANS.

In all the Provinces provision for the education of the European children is made by Government schools and Government-aided schools. The general control of these schools is committed to a provincial department, but local school authorities have great freedom in respect to the establishment, staffing, and conduct of the schools. In Cape Colony, education has been made compulsory for the children of Europeans in nine-tenths of the school districts, the upper age limit of compulsion being 14 years, and the grade limit the fourth. The obligation applies to all children living within the legal 3 miles distance from school. Districts are aided in providing necessary school buildings by Government loans, which run for long periods. The schools are supported by local fees and taxes, supplemented by Government grants.

In the Transvaal the law provides for free and obligatory education, but no upper limit of age is fixed for compulsion. In this colony the Government grant provides the chief support for the schools. In the Province of Natal, also, education is free and compulsory. In the Province of the Orange Free State education is compulsory, but fees are charged with provision for remitting same in the case of very poor children.

Provision for secondary education is made in the cities, as a rule, by public high schools or advanced classes connected with the elementary schools, but there are many private schools of secondary character, generally denominational.

The public schools for the children of Europeans and their descendants are well organized, carefully inspected, and efficient, and the ratio of school enrollment to the white population is high. Present efforts are therefore directed mainly to the improvement of the schools and the social and financial condition of the teachers.

The following statistics show the extent to which the white population avails itself of the public primary schools:

Population and capitals of the South African Provinces.

Provinces.	Population, 1911.		Capital cities.
	White.	Colored.	
Cape of Good Hope	583,177	1,979,847	Cape Town.
Natal	98,582	1,093,376	Pietermaritzburg.
Orange Free State	175,189	352,985	Bloemfontein.
Transvaal	420,831	1,255,780	Pretoria.

Primary schools for Europeans.

Provinces.	Enrollment 1911–12.	Per cent of white population.
Cape of Good Hope	91,342	15.6
Natal	16,297	16.5
Orange Free State	21,800	13.0
Transvaal	54,513	12.3

PRESENT PROBLEMS.

The establishment of schools for the European population and the means of enforcing school attendance having been provided for, the matters now engaging chief attention relate to the provision for industrial education according to the different requirements of cities and the farming regions.

In the Transvaal, which from the time of its coming under British control has had the services of a general director of education, considerable progress has been made in the direction of industrial education. At the present time there are two trades schools in the Province, one at Johannesburg and the other at Pretoria. These schools are equipped for teaching blacksmithing, carpentry, wagon making, electrical and mechanical engineering, printing and book binding, etc. Manual training has also been introduced into the public primary and high schools and into the normal schools.

Provision for agricultural training in the form of what are termed "farm schools" is under consideration in all the Provinces. The proposition is to have agricultural schools provided each with a fully equipped farm. Schools of this character are not to be confounded with the existing provision of farm schools—that is, primary

schools conducted either by itinerant teachers who go from farm to farm instructing children remote from villages and towns, or schools maintained upon one farm to which the children of adjoining farms are brought. Provision of this nature is made to some extent in all the Provinces.

EDUCATION OF THE COLORED AND NATIVE CHILDREN.

The non-European population comprises the mixed races, natives, and a small contingent of East Indians. Separate schools are maintained for the three classes, and it has not been found so far practicable to make school attendance compulsory for these people. The extent to which they are reached by elementary schools is indicated by the following statistics:

Enrollment of colored and native children.

Provinces.	Enrollment.	
	Public schools.	Mission schools.
Cape of Good Hope	2,045	109,819
Natal	1,291	28,402
Orange Free State	1,291	.....
Transvaal	1,982	14,741

EXPENDITURE.

The total expenditure for education in the several Provinces, exclusive of higher education, was as follows in 1911–12:

Cape of Good Hope	$2,712,821
Natal	108,859
Orange River (approximately)	1,000,000
Transvaal	3,200,358

HIGHER INSTITUTIONS.

The agencies for higher education are the University of the Cape of Good Hope, at Cape Town, an examining body, and the colleges which prepare students for the matriculation and degree examinations of the university. These colleges are:

South African College	Cape Town.
Victoria College	Stellenbosch.
Rhodes University College	Wellington.
Grey University College	Bloemfontein.
Transvaal University College	Pretoria.
South African School of Mines and Metallurgy	Johannesburg.
Natal University College	Pietermaritzburg.

CHAPTER XLI.

AUSTRALIA AND NEW ZEALAND.

CONTENTS.—Current educational movements; New South Wales; Queensland; South Australia; Victoria; Western Australia; Tasmania; Religious instruction.—New Zealand: Status of primary schools, 1912; secondary and higher education; technical education; expenditure.

AUSTRALIA.

CURRENT EDUCATIONAL MOVEMENTS.

The report of the Commissioner of Education for 1912 presented an epitome of the systems of education in the six States comprised in the Commonwealth of Australia and a brief review of current operations, together with statistics pertaining to the year 1911–12. The present chapter will deal simply with very recent developments in these States.

New South Wales.—In New South Wales extensive provisions have been made for the instruction of children who live in remote districts. This is done by means of (1) half-time schools under a single teacher, who devotes his time between two schools in such a way that during the week either is closed the elder pupils will have sufficient home exercises to enable them to make normal progress; (2) house-to-house teaching, for which the department supplies all necessary material; (3) subsidized schools, a private teacher being engaged by two or more families in combination, each family receiving a per capita grant of £5 or £6 per annum through the department; (4) conveyance to central school by van or steam launch (during 1912 children were so conveyed to 80 schools); (5) railway camp schools, which are held in tents with specially designed furniture, and which are opened along railway constructional works, moving as the work is shifted; (6) traveling schools on wheels, passing over districts assigned in turn.

The new scheme of secondary education came into operation in 1911; it provides for courses of study extending over four years, for new conditions of entrance, and the abolition of fees in the public high schools. The courses of study are intended to afford preparation for various vocations and have accordingly been arranged in four groups, as follows: (1) General course leading to the professional studies of higher institutions; (2) commercial course; (3) technical

course; (4) domestic course. For admission to either course candidate must have a qualifying certificate showing completion of the primary school. At the end of the first two years the successful student may receive the intermediate certificate; the leaving certificate is secured by completion of the entire course and passing the prescribed final examinations. By arrangement with the university authorities the leaving certificate is accepted in lieu of entrance examinations.

The movement for systematizing the work of continuation schools was begun in 1911, when the director of education was commissioned to make practical investigation of schools of this class in Great Britain and Europe for the purpose of recommending plans for similar schools in New South Wales. In his report the director advised the organization of evening continuation schools, as industrial, commercial, and domestic schools, and further that all pupils of the evening continuation schools should be required to take groups of subjects. His report also made sweeping recommendations with respect to compulsory attendance upon these schools, including provisions on the part of employers and also on the part of the Government itself, so far as it is an employer of labor, which should enable employees under 17 years of age to profit by the evening continuation schools. At the close of 1911, 18 continuation schools were in operation, with an average weekly enrollment of 1,597 pupils, and an average attendance of 1,162. In June, 1912, 21 such schools were in operation in the metropolitan district and 14 in country districts.

The minister of public instruction, in his report for 1912, states that, in order to fulfill the purpose for which this provision is made, he is seriously considering the question of making it obligatory upon boys and girls of 16 years of age to attend continuation schools unless otherwise educated, and of providing the means for their doing so by schools that will not involve their attendance during late evening hours.

Queensland.—A system of itinerant teachers was introduced into Queensland by the appointment of one itinerant teacher to travel in the southwestern part of the State. As the settlements extended, the provision was increased, and at present 17 such teachers are at work throughout the State. These teachers are sent where there are neither provisional schools nor part-time schools, and the children they are trying to reach are those of prospectors, graziers, stockmen, timbermen, etc., who are unable to pay for tutors or governesses, or to send their children into the towns to be educated.

The 17 itinerant teachers in 1912 covered over 55,000 miles in their attempts to carry instruction to 1,916 children of the remote districts of the State. It has been found advantageous, wherever possible, to

establish Saturday schools, which enable the children to meet their teacher once every week instead of two or three times a year. According to the official report the children show surprising zeal and intelligence at these weekly meetings. Some of the pupils walk 5 miles to meet with the teacher. In several cases parents have written to the education department saying that the establishment of the Saturday school has enabled them to stay on the land they have taken up, which otherwise they must have abandoned for the sake of their children.

Among the important features introduced into the Queensland system by the school act of 1910 were the establishment of compulsory continuation classes; compulsory medical and dental examination of school children; raising the upper limit of compulsory attendance to 14 years of age instead of 12; providing for compulsory attendance on every day on which the schools are open.

South Australia.—South Australia has taken active measures for the provision of evening continuation schools and for the establishment of medical supervision of school children. This latter service has been started by the appointment of a medical officer, a dental officer, and two trained nurses. Special efforts have recently been made to insure an adequate force of trained teachers. In addition to the full course of the university training college, a short course was inaugurated in 1912, which has proved to be of great value. The attendance was large and many applications were received for admission at the next session.

Victoria.—Under the amending education act of 1910, compulsory school attendance is required in Victoria for the full period of 8 years, between the ages of 6 and 14; pupils meeting certain conditions may obtain exemption at 13 years of age. Special provision is made by the education department for the training of the mentally deficient. A council of public education has recently been formed for the purpose of insuring expert advice on educational matters generally, for the guidance of executive officers.

Western Australia.—The education department of Western Australia opened a special school designed to give a four years' course of training to children from 13 to 17 years of age, with specialization in the last two years in vocational directions. Continuation schools have been established in 14 different centers, and were attended last year by above a thousand pupils.

Tasmania.—Like the remaining States of Australia, Tasmania has recently taken measures to advance the standard of education, and in January, 1913, two public high schools were established, one at Hobart and the other at Launcaston. These schools offer five separate courses of study, leading to professional studies or business careers.

The education department has recently extended the work of medical inspection by the appointment of two trained nurses. The report of the medical officers for 1912 shows that the examination of school children is very fully carried out, and recommendations are made that it should at the earliest possible moment be supplemented by public provision for medical treatment where needed. Improvement in the personal habits, as well as in the health of the children, is an important result of this careful supervision.

RELIGIOUS INSTRUCTION.

The universal interest manifested at the present time in the subject of religious instruction in public schools gives importance to what has come to be known as the system of New South Wales. The principal features of this system, which were particularly discussed in the conference on moral education held at The Hague, in August, 1912, are as follows:

The school teacher in school hours gives selected Bible lessons from a book provided for the purpose, but is not allowed to give sectarian teaching. Any minister of religion is entitled in school hours, on days to be arranged with the school committee, to give children of his own denomination, separated from others, an hour's religious instruction. Any parent may withdraw his child from all religious teaching if he objects to such religious instruction being given. The Scripture lesson textbooks have been used in New South Wales schools since 1848. There are a series of set questions at the end of each lesson; also valuable footnotes with a list of words and phrases to be explained.

Religious instruction has also been adopted by Tasmania, Western Australia, and Queensland (the last in 1910), and its introduction into Victoria, South Australia, and New Zealand is under consideration.

NEW ZEALAND.

STATUS OF PRIMARY SCHOOLS.

The report of the minister of education issued during 1913, and covering the year 1912, shows that New Zealand is maintaining the high standard which has long characterized the schools of that colony. The enrollment in public primary schools for 1912 was 164,492, equivalent to 16.3 per cent of the population, exclusive of aborigines. On this enrollment an average attendance of 88.9 per cent was maintained, a slightly lower ratio than that for the previous year, viz, 89.3, the falling off being due to epidemics. The enrollment in private primary schools and lower departments of secondary schools would raise the total above given to 17.7 per cent of the population and would not materially lower the ratio of attendance, since the private schools, as a rule, come under State inspection in order to receive subsidies from the public treasury. These are based upon the inspectors' reports.

With regard to the public schools, it is noticeable that a comparatively large proportion of the pupils reach a grade as high as the sixth. The compulsory school age is from 7 to 14, but children can be admitted into school at 5 years of age. The statistics show that the largest proportion of the pupils attending school at any given time are 8 or 9 years of age. For 1912 the attendance of children of the former age was 19,899, nearly all of whom were either in standard I or II; but the total number in standard VI was 9,920, or about half the number in the lower standard. Not only is the compulsory law well enforced, but children under 14 can not get exemption from school attendance unless they are able to pass certain examinations; hence there is every inducement for them to remain in school, whether they are pupils of public or private institutions.

Provision is made for the instruction of children who live remote from schools by conveyance at public expense, by rail, by water, or by carriage road. The total amount paid by the State to education boards for conveyance in 1912 amounted to £14,691 ($73,455).

During the year under review the service of medical inspection of schools and school children was brought into operation, under the joint control of the education department and the department of public health. Four medical inspectors were appointed, one being stationed at each of the four chief centers of the colony. The minister states that—

> From the experience of older countries where systems of medical inspection have been in operation for some time it is not thought necessary to examine each child more than twice, or at the most three times, in the course of his primary school life, except in cases of suspected or proved abnormality. It was accordingly decided to begin by regular inspection of the children averaging 10 to 11 years of age. As a rule the medical inspector inspects these children in any school on the first day of his visit, and on the second day examines special cases from other classes brought under his notice by the head teacher or selected by himself.
>
> An important part of the inspectors' work is to train the teachers to do their share of medical inspection, for in those countries where the system is most successful the cooperation of the teachers has been found to be a most important factor. Accordingly, the medical inspector is always accompanied by a teacher, who in this way learns much as to the aims and methods of medical inspection.
>
> This individual training is supplemented by courses of Saturday lectures given to the teachers residing in or near each important center visited. More extensive courses of lectures are given to training-college students. Notices are sent to parents of children in cases where the inspection shows that medical or dental treatment is required; no cases are, however, treated by the inspectors; parents are recommended to take their children to their own medical advisers.

The teaching force employed for the primary schools is comparatively large, numbering, in 1912, 4,743, of whom 1,717 were men. The average salaries for adult teachers, exclusive of house allowances, amounted for men to $1,025, and for women to $620, more than half the male teachers receiving each $1,000 a year. The disproportion

between the salaries of men and women is explained by the fact that many of the rural schools are extremely small and easily managed by women, and the men in the rural districts are wanted for other work.

New Zealand has made special efforts with respect to educating the children of natives, and in 1912 there were reported 108 native village schools, exceeding the number for any former year. There were also Maori pupils in attendance at 569 of the public schools. The total attendance at the native village schools was 4,694, which included 520 children of European parents.

SECONDARY AND HIGHER EDUCATION.

Provision for secondary education is made by endowed or other private schools, which, however, receive grants from the treasury. State scholarships are also maintained by means of which childrens' parents who can not pay for their tuition are enabled to continue their studies, and the law also authorizes the establishment of advanced classes in public schools where no secondary schools exist.

Higher education is provided by four institutions, the Otago University at Dunedin, Canterbury College at Christchurch, Aukland University College and Victoria College at Wellington, all affiliated to the University of New Zealand, which is an examining body.

TECHNICAL EDUCATION.

New Zealand has been distinguished by the provision made for technical training. In addition to technical evening classes which are maintained near the larger towns, there are eight day technical schools which are maintained by the combined action of the municipalities, industrial and trade organizations, and the Government. The three largest technical schools in the Dominion are situated, respectively, at Wellington, Christchurch, and Dunedin. Interest in the higher technical schools is promoted by the very ample provision made for manual training and the simpler forms of tool work, both in the public and secondary schools. In many cases the public schools are provided with special buildings for manual instruction.

EXPENDITURE.

The total public expenditure on education in New Zealand for 1912–13 was £1,234,827 ($6,174,135). Of this amount £851,675 ($4,258,375) was used for elementary education; manual and technical instruction was responsible for £93,289 ($466,445); higher education received from the treasury £25,180 ($125,900). The report of the education commission, which was submitted in 1912, has excited great interest and widespread discussion throughout the colony, but political conditions have thus far prevented definite action upon the recommendations presented. It may be said, however, that public sentiment is rapidly moving toward a closer coordination of all the teaching institutions and larger provision for free education.

CHAPTER XLII.

EVENTS OF INTERNATIONAL INTEREST.

CONTENTS.—International foundations: Amerika-Institut; American association for international conciliation. International congresses and expositions: International congress for the protection of childhood; Twenty-seventh international medical congress; congresses in connection with the international exposition at Ghent; additional international congresses, 1913. Congresses and expositions announced for 1914: The Adria exposition; International bureau federation of teachers, eighth annual reunion, Brussels, 1913; Report on the Montessori system and on luminous views with the cinematograph or other apparatus for the use of schools.

INTERNATIONAL FOUNDATIONS.

AMERIKA-INSTITUT.

The Amerika-Institut, founded at Berlin in November, 1910, under the auspices of the Prussian minister of education, was described in the Commissioner's Report for 1912 (see p. 617). Every year gives proof of the importance of this institution as a means of strengthening the cultural relations between Germany and the United States by its service as a medium of inquiry and exchange in regard to matters pertaining to education and scholarly research, literature and art, technics and social welfare, the promotion of peace and international understanding. The present director of the Amerika-Institut is Dr. R. B. Drechsler. The office is located in the new building of the Royal Library, Berlin.

AMERICAN ASSOCIATION FOR INTERNATIONAL CONCILIATION.

Among permanent results of the first Hague conference, which took place in 1899, was the establishment by Baron d'Estournelles de Constant of the "Conciliation Internationale." The first branch of this central body was the American Association for International Conciliation; branches have since been organized in other countries, and it is expected that new branches will be started in the near future.

All branch associations look to the association in Paris as the parent and model, but they are in every sense independent societies. Their relations with the parent society and with each other, while close and cooperative, are informal and involve no other than moral obligations.

The parent society and all the branches use a common seal and the same motto, which appears on the front page of publications issued by them.

A program of international conciliation, issued by Baron d'Estournelles de Constant in 1905, in which he states clearly the reasons leading to the organization in Paris, its aims and purposes, as well as the methods to carry them into effect, is in general the program of branch associations.

The executive committee of the American Association for International Conciliation includes among its members Nicholas Murray Butler, president of Columbia University; Hon. Seth Low, former mayor of New York; Lyman Abbott, editor of the Outlook; and Hon. Robert Bacon.

THE PAN-AMERICAN DIVISION.

The Pan-American division of the American association has been recently organized for the special purpose of promoting closer intellectual and cultural relations between the peoples of the Republics of America by the methods outlined in the general program. The special program of this division covers the following operations: The collection and diffusion of information with reference to the social and intellectual life and institutions of the several American Republics; the cultivation of friendly feelings between these Republics through the voluntary interchange of students, teachers, and professors; international visits of representative men and women; the encouragement of the study of the Spanish and Portuguese languages in the United States and of the English language in the other American Republics, and of a fuller provision in the higher institutions of learning for the study of the political and social life of the several Republics.

This work is undertaken by the association with the approval and support of the Carnegie Endowment for International Peace, and is a part of the Endowment's consistent policy to promote international peace by working to bring about closer and more effective knowledge of foreign countries and their respective civilizations.

The organizing director of the division is Dr. Harry Erwin Bard, with office at the headquarters of the American association, at 407 West 117th Street, New York.

INTERNATIONAL CONGRESSES AND EXPOSITIONS.

INTERNATIONAL CONGRESS FOR THE PROTECTION OF CHILDHOOD.

The International Congress for the Protection of Childhood was held at Brussels, July 23–26, 1913, under the auspices of the King of Belgium and the immediate direction of the ministers of foreign

affairs, of the interior, and of justice. The organizing committee appointed to promote the interests of the congress comprised representatives of 19 countries, in addition to Belgium itself. The final arrangements were in charge of an executive committee, of which the acting president was M. Adolphe Prins, professor at the University of Brussels.

This congress was the outcome of long-continued efforts to create in Belgium an international center for the various private societies and public agencies engaged in different countries in the care and protection of childhood. These efforts on the part of Belgium have been manifested by the organization of several international congresses, of which the first was held in 1894 at Antwerp. On this occasion an international committee was formed to make arrangements for successive congresses for the consideration and solution of problems connected with the protection of children. The committee, which received the name of international patronage committee, met at Geneva in August, 1896, and at Brussels in November of the same year, at which latter meeting the by-laws regulating its activities were drawn up. At this meeting also it was decided that the committee should seek governmental recognition.

Succeeding congresses were held at Liege in 1905 and at Antwerp in 1911. At the Antwerp congress it was decided to create an international bureau for the promotion of the purposes of the congress, and this was eventually located at Liege and is supported by appropriations from several governments.

The object of the congress held during the current year was to crown the work for which previous congresses had laid the foundation, in particular by creating an international bureau for the protection of childhood.

INTERNATIONAL MEDICAL CONGRESS.

The Twenty-seventh International Medical Congress, which met at London, August 6–12, 1913, was remarkable in respect to the delegates participating and the character of the papers presented. Among the subjects considered, special interest was excited by a review of the advance in medical science during the three decades that have elapsed since the previous meeting of the congress in London in 1881. Among the evidences of this advance, special emphasis was given to the work of Pasteur and Lister, the two prominent figures of the previous congress in London. It was observed that "time and the progress of science have but emphasized the magnitude of their contributions to medicine and surgery."

The tendency toward a "rapprochement between medicine and surgery," involving "the adoption by each branch of the medical art of what is best in the other," was dwelt upon; and the recogni-

tion of the "expanding field of medical thought and action," with corresponding increase of responsibility upon the medical practitioner. Attention was also called to "the growing importance of the new science of genetics, or eugenics, to medical practice."

At the concluding meeting of the congress Mr. John Burns, the president of the local government board, delivered an address on "the success of preventive medicine during the last three decades." He noted—

a falling death rate; the practical disappearance of typhus fever; enteric fever reduced to one-third; tuberculosis reduced to one-half; smallpox, scarlet fever, diarrhea, and dysentery materially controlled.

"The essential unity and solidarity of medicine" were illustrated by the presence of "more than 7,000 representatives and 25 nationalities meeting in fraternal and cordial intercourse" on this memorable occasion.[1]

CONGRESSES IN CONNECTION WITH THE INTERNATIONAL EXPOSITION AT GHENT.

The Kingdom of Belgium was the scene of many international congresses during the current year, the place of meeting having been determined by the international exposition, which was held at Ghent. Among these congresses was the Second International Congress on the Teaching of Domestic Science and Arts, Ghent, June 15–19.

In the same month (June 15–18) a world congress of international associations was called together, part of the sessions being held at Brussels and the remainder at Ghent. The chief purpose of this congress was to take measures for creating a central office to serve as the executive organ of the united association.

The Third International Congress of the Associations of Agricultural Women (Cercles de Fermières), held at Ghent, is noticed elsewhere in this report (see p. 783).

ADDITIONAL INTERNATIONAL CONGRESSES.

The dates and places of assembly of additional international congresses of which notice was received at the Bureau of Education were as follows:

An International Congress on Physical Education was held at the Faculty of Medicine in Paris in March, 1913.

The Tenth International Geographic Congress was held at Rome, Italy, March 27 to April 2, 1913.

[1] For an admirable survey of the proceedings, see Lindsay, J. A. "The main currents of contemporary medical thought." The Nineteenth Century and After, Vol. XIX–XX, No. 439 (September), 1913, pp. 543–552.

The Fourth International Congress on School Hygiene was held at Buffalo, N. Y., August 25–30. An account of this congress appears elsewhere in this report (page 563).

At Budapest, Hungary, August 6 to 14, an international stenographic congress was held in continuation of the tenth congress, which convened at Madrid in 1912.

In the same city, August 31 to September 5, the Tenth International Congress of Commercial Education convened.

The Adria Exposition, held at Vienna during the current year by decree of the Emperor, offered in graphic display a review of the advance in civilization, the rich historical past, and the superb natural beauty of the Adriatic countries. The exposition included treasures of sculpture and painting, and literary and musical collections. These purposes were completed by the exhibition of the products of the sea and the mainland, technical achievements in ship building, and proofs of the development of navigation, industry, and commerce. Wide announcement was made of the exposition, with a view of attracting sightseers from all parts of the world.

CONGRESSES AND EXPOSITIONS ANNOUNCED FOR 1914.

An Anglo-American exposition will be held in London between May and October, 1914, to celebrate the 100 years of peace and progress between the English-speaking peoples since the treaty of Ghent in 1814. The exposition will comprise British and American art, inventions, the advancement in navigation, transportation, constructive engineering, printing, transmission of messages and signals, progress in education, science, literature, etc. The preliminary arrangements for the exposition are in charge of general committees, including men of great prominence and influence in Great Britain and the United States.

The International Conference on the Blind will be held at London June 18–20, 1914.

The Fourth International Congress of American Students will be held at Santiago, Chile, in July, 1914.

The Congress for the Embellishment of Rural Life is to be held in Belgium during 1914; dates not yet determined.

An International Exhibition for Commercial Education will be held at Leipzig from May to October, 1914.

The Sixth International Dental Congress will be held at London, August 3–8, 1914.

The Fourth International Congress on Home Education will be held at Philadelphia, September 29 to October 2, 1914, under the combined auspices of the municipal government and 24 scholastic

and civic bodies. The president of the congress is Dr. M. G. Brumbaugh, superintendent of schools, Philadelphia. The President of the United States has accorded his patronage to the congress. The Commissioner of Education, Dr. P. P. Claxton, has accepted the chairmanship of the ninth section; subject "The home and the school in cooperation for the education of the child—Vocational education expansion."

BUREAU INTERNATIONAL DE FÉDÉRATIONS D'INSTITUTEURS.

(International Bureau Federation of Teachers.)

The year 1913 is the eighth of the existence of the International Bureau of Federation of Teachers. This bureau has held its successive annual reunions at Munich, Paris, London, Prague, again at Paris, Berlin, and Amsterdam. Out of its activities also grew the Second International Congress of Primary Education held at Paris in 1910. The annual report of the bureau for 1908, the first which contained information as to its membership, showed that eight national federations were combined, making an effective total of 151,000 members.

The report for 1912 shows encouraging progress. The number of federations comprised had reached 18 and a total membership of 411,000 members. Furthermore, the bureau has correspondents in four countries which, it is expected, will furnish affiliated members in the near future.

The present year has also been marked by great improvement in the reports of the national associations, setting forth the nature and purposes of their activities.

Among the important societies included in this bureau, with their presidents, when known, are:

Deutscher Lehrerverein. President, Herr. N. Röhl, N., 65 Seestr., 63, Berlin.
Deutsch-Österreichischer Lehrerbund.
Fédération générale des Instituteurs belges. Président, M. Ferrier, instituteur, quai de la Boverie, 13, Liége.
Asociación Nacional del Magisterio Primario.
Fédération des Amicales de France. Président, M. Roussel, rue de Vaugirard, Paris.
Norges Loererlag. President, O. J. Hoversholm, overlaerer, Kristiania.
Schweizerischer Lehrerverein. President, M. Fr. Fritschi, Sekundarlehrer, Steinwiesstr., 18, Zurich V.

England is represented in the association by many members, but no one of the educational associations appears to have joined as a body.

REPORT OF COMMITTEE ON THE MONTESSORI SYSTEM.

This federation considers at each annual session subjects of timely interest pertaining to primary education. At the eighth annual

session held at Brussels in 1913, the report of a committee appointed to consider the Montessori method was presented by the president of the federation, M. Ch. Rossignol. The report comprised an extended synopsis of the system as set forth by Dr. Montessori in her work entitled "Il Metodo della pedagogia scientifica." The report closed with a series of questions suggesting, but not affirming, the conclusions reached by the committee.

(1) Can the Montessori system be introduced into the primary schools of to-day with an attendance reaching often 60 and even 70 pupils?

(2) Is the principle of liberty or of respect for the personality of the pupil, as defined by Madam Montessori, compatible with the process of education as it is understood and given in schools of a higher grade than the Montessori school?

(3) Or, to state the inquiry negatively, is it not desirable to change the management of primary and secondary schools, inasmuch as one has to increase the respect for the personality of the pupil?

(4) How many children should be confided to a single Montessorian teacher?

(5) When the child is at school should he be allowed to feel that the work is free, or ought he to have imparted to him the idea of obligation of doing what is ordered by the teacher?

(6) Is not the idea of teaching a child to read in three years a pedagogical heresy?

(7) Is not the Montessori system best adapted to open our schools where no rule is imposed?

(8) Respecting the Montessori system, is it not desirable that every one should suspend judgment until the time when experiments have been made in different countries by teachers specially prepared for the work?

CINEMATOGRAPHS IN SCHOOLS.

A second subject considered at the same session dealt with the matter of luminous views as aids to instruction. Two reports were presented on this subject, comprising accounts of several examinations of the use of these aids that have appeared in contemporary journals or in reports of local teachers' associations. In view of the opinions and the results of experiments set forth in the articles and reports referred to, the conclusion was reached that the use of such views in schools gives fuller and more complete ideas of subjects, because they resemble closely the things themselves. This fact has long been understood by publishers of classical works, who place upon the market only illustrated dictionaries. By the aid of these pictorial illustrations pupils can see in an hour what it would take a year's instruction to impart, and the painting of the faithful image of the thing is indelibly impressed upon the young and impressionable brain.

It is comparatively easy for great cities to secure cinematographs and films relative to different subjects of instruction. This requires a first expense of some thousands, and an annual expense of perhaps $100. Smaller places content themselves with reflectoscopes and a few series of pictures, which cost altogether perhaps $60 or $100.

The formal reports on the subject which were presented by M. Rossignol, president of the federation, and by M. Skarvig, of Copenhagen, agreed in commending the use of the views, both moving and fixed, and in the conviction that cities could easily meet the necessary expense; on the contrary, it appeared that small towns and rural districts would have to be aided in this matter by the State or make use of traveling exhibits.

CHAPTER XLIII.

EDUCATIONAL LEGISLATION IN 1913.[1]

CONTENTS.—Survey commissions—Compulsory attendance—Length of term—Rural schools—Vocational education—Medical inspection and health teaching—Wider use of the school plant—The State superintendent—High schools and teacher-training—Teachers' pensions—Buildings and grounds—Textbooks—School fraternities.

The legislatures of 42 States were in session during 1912–13. While the actual volume of school laws was no greater than in other years, in respect to single pieces of constructive school legislation the year was conspicuous. Chief lines of activity were vocational education, including agricultural education; school hygiene, with special reference to medical inspection; rural school betterment; and the wider use of the school plant—in all of which a persistent campaign is resulting in permanently valuable legislation. At the same time some notable progress was made in enacting laws affecting the fundamental but less novel matters of compulsory school attendance, length of school term, and professional improvement of the teaching profession as measured by teachers' retirement laws and multiplication of teacher-training courses. Two States—Montana and Oklahoma—adopted new school codes, and Idaho made a number of changes in the code of 1911.

SURVEY COMMISSIONS.

In three States—Ohio, Minnesota, and Vermont—the legislature authorized the creation of commissions to make complete educational surveys. The Indiana commission of the previous year had come mainly from the vocational education motive. None of the three current enactments was quite so distinctly vocational in purpose. The Ohio survey, authorized by the resolution of March 11, 1913, was largely an inquiry into rural educational facilities; it has been one of the most fruitful investigations ever undertaken by any State, resulting already (January, 1914) in valuable legislation. In Vermont the purpose was more general. A commission of nine members authorized by act of November 19, 1912, was appointed by the governor to "investigate the educational system of the State."

[1] Summarized in the editorial division from material compiled by William R. Hood, of the division of school administration.

Both of these surveys are conspicuous for the spirit of scientific inquiry which has marked them throughout. Further details of these surveys are given elsewhere in this report.[1]

Minnesota's public education commission, created under the act of April 28, is to "study the educational system of the State, revise and collate the school laws, and report to the governor not later than December 1, 1914."

In Connecticut the legislature directed the State board of education to codify the school laws and the laws relating to the employment of children and to report with recommendations to the next session of the legislature. California has arranged for what promises to be a very thorough investigation of one of the modern phases of education—the play movement. A recreational inquiry committee has been appointed, pursuant to the resolution of June 2, 1913, for "studying, investigating, and reporting with recommendations upon recreation for both young and old in California, including recreation in rural communities as well as in small and large towns and cities." This is particularly welcome in its explicit recognition of the social and recreational needs of the open country.

COMPULSORY ATTENDANCE.

The six States previously reported as without compulsory school attendance laws are still without them, despite heroic efforts on the part of the friends of public education in the four of these States in which sessions were held. An especially vigorous effort was put forth in Texas. On the other hand, advances are to be recorded in two other States where conditions had been little better than in States entirely without compulsory laws. North Carolina and Tennessee, where compulsory attendance was operative only in certain counties, now have compulsory laws that apply everywhere in those States. The Tennessee law (ch. 9) makes compulsory education State-wide for children 8 to 14 years of age; also 14 to 16 if the child is not lawfully employed. In localities of less than 5,000 population 80 days' attendance will be accepted as fulfilling the law; in larger cities it must be for "full term." Truant officers and truancy schools are provided for in cities of 10,000 population and over.

The North Carolina act is more elaborate than that of Tennessee, but hardly so specific; it shows the inevitable results of compromise. The ages affected are 8 to 12 years, and the required period four months of the school term of each year. Attendance at "private or church schools taught by competent teachers" may be accepted in lieu of attendance upon the local public schools, provided this attendance is for four months continuously. Private schools will be required

[1] See pp. 207–210.

to keep records of attendance and render reports identical with those of the public schools. In Mitchell County the upper limit for compulsory attendance is made 15 years, and in Polk County the ages are 7 to 15 years. Other exemptions are, briefly: Abnormal physical or mental condition as attested by a physician; distance of 2½ miles or more from the schoolhouse; extreme poverty, making it necessary for the child to aid in his own support or the support of his parents; or—

in any case in which said parent, guardian, or other person having charge or control of the child shall show before any magistrate, by affidavit of himself and of such witnesses as the attendance officer may require, that the child is without necessary books and clothing for attending school, and that he is unable to provide the necessary books and clothes: *Provided*, that when books and clothing shall have been provided, through charity or by other means, the child shall no longer be exempt from attendance under this provision.

The North Carolina law is to be enforced by an attendance officer for each township, appointed by the county board of education. The attendance officer is also to serve as taker of the school census and keeper of attendance records, and is to be allowed for that service 3 cents per child of school age each school year. The law is carefully hedged about with provisions to compel cooperation on the part of teachers, school officers, public officials, and parents. Stringent penalties are provided.

Most of the compulsory attendance legislation of the year affects the difficult period of 14 to 16 years. New Jersey's action is typical of the uncertainty that prevails. New Jersey was one of the first States to make school attendance compulsory up to 16 years, with certain familiar exceptions. The 1913 act modifies New Jersey's stand somewhat. It is now provided that a child between 14 and 16 must attend school unless—

he regularly attended school at least 130 days during the preceding year; is able to read intelligently and write legibly simple sentences in the English language; has completed a course of study equal to five yearly grades in reading, writing, spelling, English language, and geography; is familiar with the fundamental operations in arithmetic, including simple fractions; has been granted an age and schooling certificate; and is regularly employed in some useful occupation or service.

Issuance of the age and schooling certificate is conditioned on the filing of a certificate from the medical examiner showing that the child is physically able to perform any work in which a child between the ages of 14 and 16 may legally be employed. This action is of particular interest in view of the repeated and well-substantiated claims of the vocational guidance experts that there are no jobs for children under 16 years of age that they should be allowed to take.

The Michigan act of 1913 makes this State one of the most advanced in compulsory requirements. The period of compulsion is made 7 to 16 for the entire term of school. Holders of eighth-grade diplomas are exempt, as are also "children over 14 years of age if needed for

the support of their parents"—a provision which is not as dangerous in Michigan as it might be in other States, because of Michigan's strict child-labor law. Minor exemptions include children under 9 years of age if not within 2½ miles of a schoolhouse, and if no transportation is furnished; and any child between 12 and 14 years of age while attending confirmation classes for not exceeding five months.

New Hampshire's new attendance law changes the provision for children between 14 and 16 from the general requirement, "must be able to read at sight and write legibly simple sentences," to the specific requirement of completion of the prescribed course of study for the elementary schools (ch. 221).

The Iowa provision (ch. 255) makes compulsory attendance apply to children 7 to 16 (hitherto 14), exempting children over 14 when lawfully employed and when possessed of qualifications equivalent to graduation from the eighth grade.

The new Ohio law makes special efforts to safeguard children under 16. The law raises the compulsory age limit to 15 years, if male, and 16 years, if female. Parents or guardians must send the child "for the full time that the school attended is in session," which in no case is to be less than 28 weeks. Attendance must begin during the first week of the school term, unless the child is under competent instruction at home, this to be decided by the superintendent of schools. Boys between the ages of 15 and 16 not engaged in some regular employment are obliged to attend school. One of the results of the new law was practically to eliminate the field of the compulsory continuation school, which Cincinnati had cultivated so successfully. Asst. Supt. Roberts, of that city, points out:

> The new law leaves subject to the old unchanged continuation-school law only those boys at work between 15 and 16 who have not finished the eighth grade. However, under an interpretation of the attorney general, which construes as valid all age and schooling certificates issued before the new law went into effect in August, all children thus at work and subject to the law are attending continuation classes.

The law contains a carefully considered provision for the issue of age and schooling certificates. Such a certificate must be presented by every boy under 16 and every girl under 18 who seeks any kind of employment, and employers are required to keep these certificates on file for inspection by the truant officer or officer of the department of workshops and factories. Certificates will be issued only after proof has been furnished that the child, if a boy, has passed a satisfactory sixth-grade test, and if a girl, the seventh-grade test, this proof to be furnished by a "juvenile examiner" in city school districts, who may either examine the child or accept the records of the school attended, if he is satisfied that its standards are sufficiently high. If a boy between 15 and 16 loses his employment, he is com-

pelled to report the fact at once to the superintendent of schools, and he will be required to return to school after two weeks if other employment has not been obtained. The law further requires health certificates from boys between 15 and 16 who seek employment, but this certificate may be waived if the records of the school physician show that the pupil's previous health has been sound.

Indiana also legislated on compulsory education for the period 14 to 16 years of age; the employment certificate must show that the applicant has passed fifth grade, instead of sixth grade, as in Ohio. In Massachusetts important legislation was enacted on employment of minors, much of it covering the period 14 to 16 years of age (ch. 831; also 779 and 805). Massachusetts also extended the compulsory provision to require attendance at public evening schools, where such exist, of all illiterate minors between 16 and 21 for a sufficient period to learn to read and write (ch. 467).

LENGTH OF TERM.

In seven States laws were enacted making more or less important changes in length of school term. The action of these States varied as widely as the standards of education vary in the United States, but the net result was a real gain. Most noteworthy was the action of North Carolina in providing for a minimum school term of six months in every public school in the State, and appropriating $250,000 for carrying out the law, the money to be apportioned according to school population. The act further provides that 5 cents of the annual State tax levied on the $100 of valuation shall be set aside as a "State equalizing school fund."

Nebraska has raised the minimum school term from three to four months for districts having fewer than 20 pupils. For districts having 20 to 75 pupils the minimum has been raised from 6 to 8 months; and a district having more than 75 pupils must have a school term of not less than 9 months. Every district must keep school open 9 months if this can be done on a levy of 15 mills, and for 8 months if it can be done on a levy of 20 mills.

Missouri, in reenacting the statute relating to length of term, broadens its application to include State aid for all counties not exceeding $50,000 assessed valuation (was $40,000), and omits conditions of area of district and number of children of school age. The only condition is that an average attendance of 15 pupils must be maintained, but in lieu of this an attendance of 60 per cent of the school population, whatever it is, will be accepted. The maximum amount of State aid is increased from $80 to $100 annually. New Mexico makes further provision for holding school for at least five months in every district by offering not exceeding $300 for building or completing schoolhouses and not exceeding $50 for furnishing the

schoolroom (ch. 75). In Vermont the period of school attendance required of every child every year was increased from 140 to 150 days. New York continues its notable progress in bringing rural schools up to an advanced State standard by requiring, in the amended law, (ch. 511) that school be conducted for 180 days, instead of 160, throughout the State, as a condition of receiving money by State apportionment. A deficiency not exceeding 6 days will be allowed for teachers to attend teachers' conferences held by district superintendents.

RURAL SCHOOLS.

The lengthening of term referred to in the foregoing paragraphs is in the main an item of progress in rural schools. In the States cited the lengthened term refers almost entirely to the country, the cities throughout the United States having long since reached a standard of 180 days or more. There are other definite instances of rural school progress in the 1913 legislation. The Florida Legislature passed a law creating two State rural school inspectors at salaries of $2,000, to devote all of their time to visiting and supervising the rural schools of the State. An allowance of $1,250 is made to each officer for traveling expenses.

The movement for consolidation of rural schools still produces much legislation. Missouri, South Dakota, Tennessee, and Idaho have legislated on the subject in the past year. The Missouri act provides that the qualified voters of any community in Missouri may organize a consolidated school district for the purpose of maintaining both elementary schools and high schools. No consolidated district may be formed that does not contain at lest 12 square miles or have an enumeration of at least 200 children of school age. With regard to transportation the provision is as follows:

> If transportation is not provided for in any school district formed under the provisions of this act, it shall then be the duty of the board of directors to maintain an elementary school within 2½ miles, by the nearest traveled road, of the home of every child of school age within said school district: *Provided, further*, that if transportation is not provided for, any consolidated district may by a majority vote at any annual or special meeting decide to have all the seventh-grade and the eighth-grade work done at the central high-school building.

As an aid to consolidation, the State of Missouri will pay one-fourth of the amount required, up to $2,000, for building and equipping a central high-school building. To meet State requirements the district must provide this central building with a site of not less than 5 acres. The building itself must contain one large assembly room for meetings of the citizens of the district and must have a modern system of heating and ventilating. In Tennessee each county board of education is given authority to consolidate two or more schools and provide transportation of the pupils out of county school funds.

Wisconsin provides special State aid on a graduated plan to defray half the cost of erecting and equipping buildings for consolidated districts as follows: Consolidated schools maintaining one department, $500; two departments, $1,500; three departments, $2,000; four or more departments, $3,000; township graded school and high school, $5,000. State aid will also be given for transportation under certain specified conditions—transportation to be provided for at least 32 weeks; average daily attendance of transported pupils must be at least 80 per cent of the entire number enrolled for transportation; driver to be of thoroughly responsible character and with a suitable and comfortable conveyance.

VOCATIONAL EDUCATION.

The definiteness of the trade and industrial side of the vocational education movement is reflected in the vocational legislation of the year. The new laws of Indiana, Pennsylvania, and New Jersey are similar in their careful definition of the differing fields of vocational education; in fact, they were written largely under the direct advice of the National Society for the Promotion of Industrial Education, and follow closely the program formulated by that organization at the meeting in Philadelphia in December, 1912.[1] In Indiana the vocational education law was the outcome of a special investigation of conditions in that State.[2] The law is characterized by an insistence upon instruction with general industrial aims even in the grades. The following section will illustrate:

> Elementary agriculture shall be taught in the grades in all town and township schools; elementary industrial work shall be taught in the grades in all city and town schools; and elementary domestic science shall be taught in the grades in all city, town, and township schools. The State board of education shall outline a course of study for each of such grades as they may determine, which shall be followed as a minimum requirement.

The law provides that after September 1, 1915, all teachers required to teach elementary agriculture, industrial work, or domestic science shall have passed an examination in such subjects prepared by the State board of education.

For carrying out the law the State board of education was reconstituted to consist of the superintendent of public instruction; the presidents of Purdue University, the State University, and the State normal school; the superintendents of schools of the three cities having the largest number of children enumerated for school purposes; three citizens actively engaged in educational work in the State, at least one of whom shall be a county superintendent of schools; and "three persons actively interested in, and of known sympathy with, vocational education, one of whom shall be a representative of em-

[1] See Educ. Rep., 1912, Vol. I, ch. 10, pp. 290–291. [2] Ibidem, Vol. I, ch. 9, pp. 277–280.

ployees and one of employers." The State superintendent, with the advice and approval of the State board of education, is empowered to appoint a deputy superintendent in charge of industrial education and domestic science. For agricultural education, the State superintendent is authorized to cooperate with Purdue University in the appointment of "some person actually connected with the agricultural extension work at Purdue," as an agent in supervising agricultural education, who shall serve in a dual capacity as an agent of the State superintendent and assistant at Purdue University. Provision is also made for county agents, to cooperate with farmers' institutes, farmers' clubs, and other organizations; to conduct practical farm demonstrations, boys' and girls' clubs, and contest work and other movements for the advancement of agriculture and country life; and to give advice to farmers on practical farm problems and aid the county superintendent of schools and the teachers in giving practical education in agriculture and domestic science. A State fund for vocational education is established by the annual levy, as a part of the State common school levy, of 1 cent additional on each $100 of taxable property in the State.

New Jersey provides for the establishment of State-aided vocational schools. Two methods of organization are recognized, (*a*) as separate schools, (*b*) as departments of other schools. When organized as a separate school, the vocational school must be in a building used solely for the work. It must have a separate organization for curricula, equipment, pupils, and teachers. While this school is a separate and distinct organization, it is, nevertheless, under the direct control of the board of education of the district organizing and maintaining it. When organized as a department of another school, it must be independent of the rest of the school in its vocational work and have a separate head or director for such work. County vocational schools are also authorized. State aid equal in amount to the money raised locally is provided, not to exceed $10,000 for any one school. The work is placed in charge of a "deputy commissioner in charge of vocational education, including agriculture." A further act authorizes the State board of education to establish summer schools for training teachers of vocational subjects.

The Connecticut act providing for the establishment of industrial schools (ch. 217) authorizes school boards to establish day, evening, continuation, or part-time classes. When the local authorities begin the work, the State pays half of the gross expenses of maintenance, less returns from sale of products, not to exceed $50 per pupil. In schools that may be organized by the State board of education, the net expenses will be paid by the State, and the towns selected for such schools must furnish buildings and equipment. The total amount authorized from the State is $125,000. By a later

act school boards in Connecticut are allowed to establish vocational guidance as part of the educational system and to employ vocation counsellors.

Montana's new school code makes it obligatory for school districts of 5,000 or more inhabitants to maintain at least one manual training school, to be taught by teachers holding special certificates from the State superintendent. In districts having 10,000 or more population special courses for direct vocational training must be established, to which pupils over 12 years of age who have completed the fifth grade may be admitted. Trustees are empowered to use money from the graded school fund for the maintenance of manual and industrial schools, and the State treasurer is directed to pay to districts maintaining such schools and to county high schools maintaining such courses $10 for each pupil in attendance six months.

Agricultural education is provided for in a number of special acts. Nebraska, Vermont, Tennessee, New Jersey, Pennsylvania, and Michigan authorize county farm demonstration work in one form or another. A Washington law creates a bureau of farm development to work in the counties. Wisconsin authorizes county "agricultural representatives for the purpose of aiding in agricultural development," and will pay $1,000 annually to each county organizing such work. Kansas authorizes the county commissioners to establish a county demonstration farm. Colorado provides for the appointment by the county commissioners of a county agriculturist to study farm management and to give instruction to farmers. Missouri authorizes the county courts to appropriate funds for a county farm advisor to act with the State college of agriculture in encouraging agricultural development. Wisconsin carries the short-course idea into her high schools, with courses of not less than 16 weeks' duration in not exceeding 20 high schools. The State contributes $200 per course. Michigan and Wyoming add agriculture to the list of subjects in which teachers are to be examined. Florida appropriates $1,500 annually for two years for the promotion of work in boys' corn clubs and girls' canning clubs. Iowa requires instruction in elementary agriculture in the public schools. In Texas one of the functions of the new farmers' county public libraries to be established is to employ a librarian "whose duty it shall be to gather information pertaining to agriculture, horticulture, and kindred subjects," and to make such information available to farmers.

A large number of minor enactments for the encouragement of vocational education deserve mention. Nevada provided that the prescribed courses of study in the seventh and eighth grades should comprise "business forms and elementary bookkeeping or some features of industrial work, and in the high-school grades provision for full commercial work and industrial work suitable for boys and

girls." The Wisconsin Legislature of 1913 increased from $50,000 to $100,000 the amount of State aid to free high schools maintaining courses in manual training, domestic economy, or agriculture; and granted an additional $100 to a district maintaining a graded school of the first or second class in which instruction is offered in agriculture and other industrial subjects. An amendment to the New York law empowers school boards to establish part-time and evening vocational courses; the length of term required for receiving State aid is reduced from 38 to 36 weeks. In Arizona the State is to pay a sum equal to one-half the amount provided by any school for the support of vocational training. Iowa gives the following aid to consolidated schools equipped with two or more rooms including industrial and vocational subjects in the course of study: Two-room building, $250 toward equipment and $200 annually; three-room building, $350 toward equipment and $500 annually; four or more rooms, $500 toward equipment and $750 annually.

MEDICAL INSPECTION AND HEALTH TEACHING.

Most of the current progress in school medical inspection and other phases of school hygiene is in the cities, and has come about independently of State legislation, except where special permissive laws are necessary for municipalities. In New York State, however, medical inspection has not only been made mandatory (ch. 627), but the mandatory section is made effective by the provision that the State commissioner of education may withhold public money from a district not complying with the law. The act further provides that school boards shall employ physicians as medical inspectors and may employ nurses. Pupils are required to furnish health certificates on entering school each year.

In Ohio a supplementary act includes teachers and janitors within the scope of examination by the school physician. The law provides that whenever a school child, teacher, or janitor is found to be ill or suffering from positive open pulmonary tuberculosis or other contagious disease "the school physician shall promptly send such child, teacher, or janitor home." If a teacher or janitor is found to be suffering from tuberculosis at the open stage, or any other communicable disease, his or her employment shall be terminated upon expiration of the contract, "or, at the option of the board, suspended upon such terms as to salary as the board may deem just until the school physician shall have certified to a recovery from such disease."

New Hampshire's medical inspection law is permissive (ch. 83). Any city, union, special, or town school district may adopt its provisions. School physicians must have had at least five years' medical experience. The law provides for medical examination every year of all pupils, teachers, janitors, and other employees, of school

buildings, grounds, and surroundings to such extent as the health of pupils may require. The teacher will refer the pupil who shows signs of ill health or disease to the parent or guardian for examination by some regularly registered physician. If the child is not so examined, he must be examined by the school physician. Special tests in vision and hearing are prescribed; the school physician is to have every child in the public schools carefully tested and examined in the presence of the teacher at least once in every school year to ascertain whether he is suffering from defective sight or hearing—

or from any other disability or defect tending to prevent his receiving the full benefit of his school work or requiring a modification of the school work in order to prevent injury to the child or to secure the best educational results.

Several of the 1913 laws relate to transmission of communicable disease, especially tuberculosis. The common drinking cup in schools is barred by a legislative act in Minnesota, West Virginia, Nebraska, North Dakota, and Wisconsin. As an aid to the fight against tuberculosis the New Hampshire State Board of Health is required to prepare bulletins on the cause and prevention of tuberculosis. The school board of every district in the State must furnish each teacher with sufficient copies for all the families in the district. An Ohio law provides for the appointment of one or more instructing and visiting nurses to visit any house or place in the county where there is a case of tuberculosis. In Wisconsin each county board of supervisors is authorized to appoint a graduate nurse to act as consulting expert on hygiene; one of her duties is to visit the schools to give instruction in the prevention of tuberculosis.

Other health measures of direct interest to the schools were the New Jersey law authorizing large cities "to make annual appropriations to incorporated dental associations which conduct and maintain dental clinics for the free treatment of indigent children" (ch. 291), and the Massachusetts act authorizing cities and towns to furnish meals free or at cost to school children. The latter provides that—

the city council of a city and the selectmen of a town may provide meals or lunches free or at such price, not exceeding the cost, as they may fix, for children attending its public schools, and cities and towns may appropriate money for this purpose.

The act must be approved by a majority of the voters in a community before going into operation.

WIDER USE OF THE SCHOOL PLANT.

The social center agitation resulted in definite constructive legislation in 1913. At least nine States passed laws recognizing explicitly the principle of wider evening use of school plants for social, intellectual, or recreational purposes. The laws of New York and New Jersey, which are practically identical, are typical of what is sought.

These laws specify five distinct purposes, other than the customary ones, for any or all of which school property may be used:

1. By persons assembling therein for the purpose of giving and receiving instruction in any branch of education, learning, or the arts.
2. For public library purposes or as stations of public libraries.
3. For holding social, civic, and recreational meetings and entertainments, and other uses pertaining to the welfare of the community.
4. For meetings, entertainments, and occasions where admission fees are charged, when the proceeds thereof are to be expended for an educational or charitable purpose.
5. For polling places for holding primaries and elections, for the registration of voters, and for holding political meetings.

Idaho authorizes school trustees to permit the use of schoolhouses "for community purposes"; Massachusetts enumerates "educational, recreational, social, civic, philanthropic, and similar purposes" as constituting permissible types of wider use activity; Indiana specifies that civic gatherings in schoolhouses must be nonpartisan. The Kansas acts appear to be somewhat different in tone—one authorizes school boards to open schoolhouses for the use of religious, political, literary, scientific, mechanical, or agricultural societies, or societies for the suppression of crime; a second law adds night schools and improvement associations to the list. The California law is both explicit and comprehensive. It provides for the—

free use of all public schoolhouses and property for the establishment of a civic center at each and every public schoolhouse in the State, and the maintenance, conduct, and management of the same.

THE STATE SUPERINTENDENT.

Centralization of educational control and supervision within the States continue to be marked, as for several years, by growing recognition of the dignity, power, and responsibility of the State superintendent of public instruction, or whatever the designation may be in the separate States. One indication of this is the upward trend of salaries for chief State officers. In Maine the salary has been raised from $2,500 to $4,000; Wisconsin will hereafter pay her superintendent $5,000, and the assistant State superintendent $3,000; Minnesota, $4,500; West Virginia, $4,000; New Hampshire, not exceeding $4,000. In New Hampshire three deputy State superintendents are provided, at least one of whom shall be a woman.

In Delaware the legislature created the office of State commissioner of education. Although the salary ($2,000) is hardly commensurate with the importance of the work to be done, the step is generally recognized as in the right direction. In Minnesota the "State superintendent of education," as he is now designated, is to have a term of four years after 1915 instead of two, as heretofore. Two new duties are imposed upon him—he is to prepare a uniform system of records

for all public schools and establish a uniform system of accounting, and he is to pass on plans and specifications for buildings and condemn unfit buildings (ch. 550). In Iowa the superintendent is to hold office by appointment from the governor instead of by popular election, and North Dakota's law of March 11, 1913, provides for nonpartisan nomination and election of both State and county superintendents.

HIGH SCHOOLS AND TEACHER-TRAINING.

One most important development in secondary education that is viewed differently by different observers is teacher-training in high schools. Originating in New York State, the plan has developed most rapidly in the Middle West. Nebraska now has 153 high schools engaged in training teachers; Kansas has 160; and Arkansas, which recently entered the field, has 15.

A recent Missouri law, designed to prepare teachers for elementary and rural schools, grants State aid to the amount of $750 annually to approved high schools and academies maintaining teacher-training courses. Not more than $1,200 is to be distributed to any one county; $100,000 has been appropriated to carry out the provisions of this act. The Kansas Legislature appropriated $125,000 annually for two years to high schools maintaining manual training courses. Minnesota increased the amount of State aid to teachers' training departments from $750 to $1,000 by act of April 12, 1913. Even Wisconsin, with adequate county normal schools, has made provision for teachers' training courses in free high schools in counties that are without county training schools. In the East, Vermont also provided during the year for training teachers in high schools for the benefit of rural schools. High schools and academies of the first class are authorized to establish such courses under the direction and approval of the State board of education.

TEACHERS' PENSIONS.

Four States established pension systems during the legislative year 1912–13—Massachusetts, California, North Dakota, and Maine. The Massachusetts system was adopted after a very careful survey of pension systems in the United States and abroad. It is considered by some observers to be the best in respect to scientific insurance principles yet adopted.

The law goes into effect July 1, 1914. All teachers who enter the service for the first time after that date must become members of the Teachers' Retirement Association. Teachers now in service may become members. Principals, supervisors, and superintendents are

classified with teachers according to the law. As Boston has had a separate pension system for teachers since 1900, Boston teachers are not eligible to membership in the retirement association. Teachers in day industrial schools operating under the provisions of chapter 471, acts of 1911, are eligible for membership.

The system provides that in the future a member of the retirement association shall contribute a small part of his salary for a term of years not exceeding 30. Upon retiring at the age of 60 or over, the teacher's contributions are used to purchase an annuity. The State contributes a pension of equal amount. In case of death or withdrawal from service before the age of 60 refund is made of the teacher's entire contributions, with 3 per cent compound interest. For teachers now in service who have served at least 15 years in the public day schools of Massachusetts, 5 of which must immediately precede retirement, the State guarantees that the total retiring allowance shall be at least $300 a year upon retiring from service at the age of 60 or over. The law specifies that the rate of assessment shall lie between 3 per cent and 7 per cent of a teacher's salary, and the retirement board has established a 5 per cent rate for the year beginning July 1, 1914. No assessment is to be less than $35 nor more than $100 a year. Payments will be deducted from the teacher's compensation on pay days by the treasurers of the cities and towns.

The management of the retirement system is vested in the teachers' retirement board, consisting of seven members: The insurance commissioner for the Commonwealth, the bank commissioner for the Commonwealth, the commissioner of education for the Commonwealth, three members of the retirement association, and one other person.

In commenting on the expected working of the act, Mr. C. A. Prosser declares:[1]

> The amount necessary to yield an annuity of $500 at age 60 years will yield very nearly $750 at age 70 years. Hence it will be possible for teachers paying the maximum assessments ($100 per annum) for a long term of years to retire on an allowance of $1,500 if they continue in service until age 70 years. As an offset to the possible temptation to remain in service too long for the sake of building up a larger equity, provision is also made for retirement after age 60 years by the school committee.

The California plan is of the contributory type. The State contributes as its share 5 per cent of the moneys collected every year under the inheritance or transfer tax law. Every teacher is assessed $1 a month, deduction being made at the time of salary payment. Thirty years of service is required, at least 15 of which must have been in the State, including the last 10 years of service immediately preceding retirement. Voluntary retirement will be allowed at the

[1] Prosser, C. A.: The teacher and old age. Riverside Educational Monographs. Houghton Mifflin Co., New York, 1913, p. 107.

end of the 30-year period; or, if physically or mentally incapacitated, a teacher may be compelled to retire by the board of education. An annual retirement salary of $500 will be paid. In case of bodily or mental infirmity after 15 years of service, a teacher may go into voluntary or involuntary retirement, receiving as an annual stipend the fractional part of $500 represented by his years of service.

In North Dakota the pension system is also of the contributory type. The deduction from salaries is 1 per cent (but not exceeding $20 a year) for the first 10 years of service, 2 per cent (but not exceeding $40 annually) until the teacher has had 25 years of experience. Contribution to the fund is obligatory for all teachers entering the service after January 1, 1914. Teachers are eligible to retirement after 25 years of service, 18 of which, including the last 5, must have been in the State. To provide money for the fund the county treasurers are directed to set aside from the county tuition fund a sum equal to 10 cents for each child of school age. The annuity equals one-fiftieth of the teacher's average salary for the last five years, multiplied by the whole number of years of service as a teacher. An important provision is that teachers withdrawing at any time are entitled to receive one-half the total amount contributed.

The Maine law provides a straight old-age pension, as follows:

Any person of either sex who, on September 30, 1913, or thereafter, shall have reached the age of 60 years and who for 35 years shall have been engaged in teaching as his principal occupation, and who shall have been employed as a teacher in the public schools, or in such other schools within this State as are supported wholly or at least three-fifths by State or town appropriation and are under public management and control, 20 years of which employment, including the 15 years immediately preceding retirement, shall have been in this State, and who shall be retired by his employer or shall voluntarily retire from active service after completion of the school year next preceding the 30th day of September, 1913, shall, on his formal application, receive from the State for the remainder of his life an annual pension of $250; *Provided, however,* That after the 30th day of September, 1913, no such employment as teacher within this State shall be included in its provisions unless the teacher shall hold a State teachers' certificate issued under the authority of the State superintendent of public schools.

Any person of either sex who, on September 30, 1913, or thereafter, shall have reached the age of 60 years and who for 30 years shall have been engaged in teaching as his principal occupation, and who shall have in all other respects met the requirements of section 1 of this act shall, on his formal application, receive from the State for the remainder of his life an annual pension of $200.

Any person of either sex who, on September 30, 1913, or thereafter, shall have reached the age of 60 years, and who for 25 years shall have been engaged in teaching as his principal occupation, and who shall have in all other respects met the requirements of section 1 of this act shall, on his formal application, receive from the State for the remainder of his life an annual pension of $150.

In addition to the laws just cited, Indiana created a teacher retirement system for Terre Haute; Illinois provided for contribution from public moneys in cities of over 100,000 population; and Oregon

increased the public support for the teachers' retirement fund by giving 3 per cent, instead of 1 per cent, of the district's portion of the county school tax and all fees collected from teachers and other employees.

BUILDINGS AND GROUNDS.

Ohio maintains its advanced position with regard to State control and supervision of schoolhouse construction. Several amendments in 1913 to the general code were all of a nature to make an effective law still more effective by extending fireproof provisions practically to all structures of any size used for school purposes.

A new Texas law regulates the lighting, heating, ventilating, sanitation, and fire protection of public-school buildings costing over $400. County superintendents are authorized to issue permits for such buildings, and no school board is allowed to build without first having obtained a permit.

The special point of fire protection was covered here and there in a number of laws. Connecticut requires fire escapes for every schoolhouse of two or more stories in which the greatest elevation of any floor used by pupils is 10 or more feet above the ground. In Kansas the office of State fire marshal was created; his duties are to see that teachers have a fire drill at least once a month and that doors and exits are kept unlocked during school hours. Lessons on the causes and dangers of fires are to be given at least once in every quarter, the material for the instruction to be based on a bulletin prepared by the fire marshal's office. A fine of $10 is provided for any board of education which fails to comply with the law. Oregon is another State where instruction in fire danger was added during 1913. Minnesota, Indiana, and Oregon all enacted laws during 1913 requiring fire drills at least once a month; in Oregon the law is made to apply to both public and private schools. A North Dakota act requires that all exits for schoolhouses having more than one room shall open outward and that fire escapes be attached to all school buildings having more than one story.

TEXTBOOKS.

Several phases of the schoolbook agitation are reflected in 1913 legislation. Michigan is wary of the "book trust"; California is deep in the difficulties of State printing; several States are experimenting with State adoption; while others are appointing commissions to find out what neighboring States have done.

The Michigan law (Act No. 315) compels firms selling schoolbooks to file a bond with the State superintendent that they have not entered into "any understanding, agreement, or combination to control the prices or to restrict competition in the sale of school

textbooks." Other provisions are that the firms or individuals having schoolbooks to sell must file copies of all textbooks sold by them, with a sworn statement of the usual list price, the lowest wholesale price, and the lowest exchange price. The bond, which is to be not less than $2,000 and not more than $10,000, is also to make certain that the book dealer will furnish any of the books listed in all schools in the State at the lowest prices contained in the statement and that he will maintain this price uniformly throughout the State; also that the book dealer or firm—

> will reduce such prices automatically in Michigan whenever reductions are made elsewhere in the United States; and that all textbooks offered for sale, adoption, or exchange shall be equal in quality to those deposited in the office of the State superintendent.

In case of violation of the provisions of the bond the State superintendent shall declare the bond forfeited, and if judgment is rendered against the dealer he will be barred from further continuance of his business within the State of Michigan for a period of five years. Various restrictions are put on the retail dealer and the school district to prevent more than a slight increase over the wholesale list price in selling to school children. A somewhat unusual provision is that when a family moves from one school district to another within the State the treasurer of the district shall purchase, at a fair price, the textbooks in actual use by the children of the family. The price is to be based on the condition of the books, and these books may be resold, when necessary, to other pupils moving into the district.

California's attempt to distribute State textbooks free, in accord with the constitutional provision, was signalized by an appropriation of $500,000 to pay for this service. By chapter 364 (June 13) school boards and other officers empowered to designate textbooks are ordered to give preference to books written, compiled, printed, and published in the State.

The new Montana code provides for State adoption. The governor is empowered to appoint a State textbook commission of seven members. This commission is to meet on the third Monday in July, 1917, and every second year thereafter, to consider changes in textbooks, receive proposals, etc. Changes are not to be made in the textbooks of more than three subjects at any one meeting. For the enforcement of State adoption, it is made a misdemeanor to use books other than those selected by the commission, and county superintendents are obliged to require school boards to report whether the adopted books were used.

In Georgia and North Carolina commissions have been appointed to investigate schoolbook conditions. The North Carolina commission was empowered to investigate and report to the legislature

on the advisability of the State publishing schoolbooks and furnishing them to citizens at cost. In New York the commissioner of efficiency and economy was authorized to investigate and gather statistics and make report to the legislature upon the subject of the cost of providing free textbooks "in all the schools within the State supported by the State and its several subdivisions." Laws extending the free textbook principles were enacted in Missouri, Nevada, North Dakota, and Oregon. Rhode Island passed a law allowing textbooks to become the property of a pupil who has completed the use of them in school, subject to rules and regulations prescribed by the school committee; and Indiana provides for uniform textbooks in the high schools of the State, the State board of education constituting itself a commission to select such books.

SCHOOL FRATERNITIES.

Secret societies were legislated out of existence in a number of States in 1913. The Montana code contains several specific provisions prohibiting them. Michigan made the already existing act more strict by striking out the limit of time in which notice shall be given to offending pupils; the law leaves to the discretion of the school boards the steps taken to abolish school societies.

The Colorado law prohibiting "secret fraternities, sororities, or societies, in the public schools," recites—

> That from and after the passage of this act it shall be unlawful for any pupil, registered as such, and attending any high school, district, primary, or graded school which is partially or wholly maintained by public funds, to join or become a member of any secret fraternity, sorority, or society wholly or partially formed from the membership of pupils attending any such schools, or to belong to or take part in the organization or formation of any fraternity, sorority, or society, except such societies or associations as shall be sanctioned by the boards of directors of the school districts wherein such schools are maintained.
>
> It is hereby declared to be unlawful for any person to cause, solicit, induce, or encourage any pupil or pupils of such schools to join any such fraternity, sorority, society, or association mentioned in section 1 hereof, or to solicit any such pupil or pupils to attend any meeting for the purpose of what is commonly known as "rushing," or to induce or solicit any such pupil or pupils to join any fraternity, sorority, society, or organization organized outside of said school, except such societies or associations as shall have been first sanctioned by the board of directors of the school district wherein such school is maintained.

Pupils violating the provisions of the law are declared to be delinquents and may be proceeded against as such; and anyone advising or encouraging such violation will be dealt with as contributors to the delinquency of children.

Maine and Oklahoma also passed laws prohibiting secret societies in the public schools.

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