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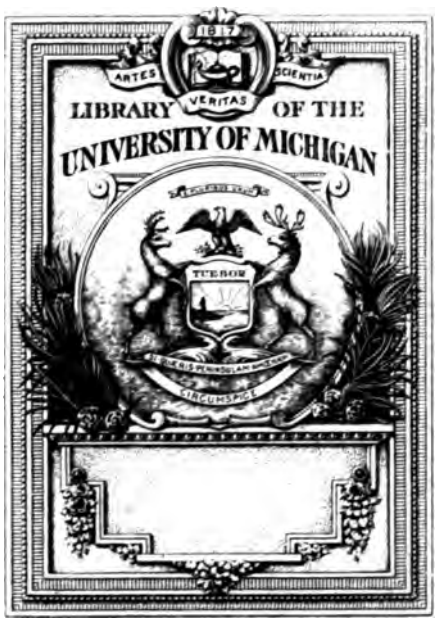
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PROCEEDINGS

OF THE

Department of Superintendence

OF THE

National Educational Association

AT ITS

MEETING IN PHILADELPHIA

February 24, 25, 26, 1891



PROCEEDINGS

OF THE

DEPARTMENT OF SUPERINTENDENCE

OF THE

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FEBRUARY 24TH, 25TH, 26TH, 1891

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DEPARTMENT OF SUPERINTENDENCE.

SECRETARY'S MINUTES.

FIRST DAY.—MORNING SESSION.

TUESDAY, *February* 24, 1891.

THE Department of Superintendence of the National Educational Association met in Association Hall, Fifteenth and Chestnut Streets, Philadelphia, Pa., on Tuesday morning, February 24, 1891. The meeting was called to order at 10 o'clock, by the President, Andrew S. Draper, State Superintendent of New York.

Prayer was offered by the Rev. Dr. George Dana Boardman of the First Baptist Church of Philadelphia.

Addresses of welcome were delivered as follows:

By Dr. William Pepper, Provost of the University of Pennsylvania, in behalf of the University and the higher educational institutions of the city.

By President James MacAlister, of Drexel Institute, in behalf of the city.

By Mrs. Mary E. Mumford, in behalf of the Board of Education.

President MacAlister presented the compliments of the following institutions, extending cordial invitations to the members of the Department to visit any or all of them as occasion and inclination might offer: Philadelphia Art Club, Academy of Fine Arts, Historical Society of Pennsylvania, Academy of Sciences, Philadelphia Museum of Industrial Art, and Girard College.

To these addresses and invitations the President of the Department made suitable response in behalf of the Department, tendering thanks for the same and accepting the invitations proffered.

After preliminary remarks touching the aims and work of the Department, the President took up the regular work of the programme.

Supt. J. M. Greenwood, of Kansas City, Mo., was appointed to report the discussions of the morning session.

Supt. N. C. Dougherty, of Peoria, Ill., read a paper on Compulsory Education in Illinois and Wisconsin.

The subject was further discussed by the Hon. John Hancock, State Superintendent of Ohio; President James MacAlister, of the Drexel Institute, Philadelphia; John MacDonald, of the *Western School Journal*,

Topeka, Kansas, and the Hon. O. E. Wells, State Superintendent of Wisconsin.

Mr. George H. Martin, Agent of the Massachusetts State Board of Education, read a paper on Compulsory Education in Massachusetts.

The question was further discussed by Supt. Edwin P. Seaver, of Boston, Mass.; Supt. I. N. Mitchell, of Fond du Lac, Wis.; Supt. A. P. Marble, of Worcester, Mass.; Hon. B. G. Northrop, of Connecticut, and Hon. Thos. B. Stockwell, State Superintendent of Rhode Island.

The President appointed the following Committee on Resolutions: Supt. A. P. Marble, of Massachusetts; Supt. W. R. Garrett, of Tennessee; Supt. A. B. Blodgett, of New York; Supt. Henry Sabin, of Iowa, and Supt. H. W. Compton, of Ohio.

Supt. Edwin P. Seaver was appointed to report the discussions of the afternoon.

Adjourned to meet at 3 o'clock P.M.

AFTERNOON SESSION.

The Department reassembled at 3 o'clock, President Draper in the chair. Superintendent J. M. Greenwood presented his report of the morning discussions. Report approved.

The following resolution, by Superintendent Greenwood, was adopted:

That each speaker who participates in the discussion of any topic on the programme shall be limited to five minutes, unless further time be granted by the Department.

Supt. Aaron Grove, of Denver, offered the following resolution:

That the Executive Committee of the National Educational Association, consisting of the President, Secretary, Treasurer, the First Vice-President, and the President of the Board of Trustees, be requested to report to this Department before the adjournment of this session, whether they can provide for the immediate publication of the volume of this meeting.

Resolution unanimously adopted.

By Mr. W. E. Sheldon, of Massachusetts:

That the President appoint the usual Committees.

Adopted.

Supt. W. E. Anderson, of Milwaukee, Wis., read a paper on the Qualification and Supply of Teachers for City Schools.

The subject was further discussed by Messrs. A. B. Blodgett, of Syracuse, N. Y.; L. O. Foose, of Harrisburg, Pa.; D. W. Harlan, of Wilmington, Del.; W. N. Barringer, of Newark, N. J.; Thos. Walton, of Philadelphia; John T. Prince, of Boston; C. W. Bardeen, of the *School Bulletin* of Syracuse, N. Y.; Thos. M. Balliet, of Springfield, Mass.; James MacAlister, of Philadelphia; S. T. Dutton, of Brookline, Mass.; J. M. Greenwood, of Kansas City, Mo.; E. E. White, of Cincinnati, Ohio; E. Stanley Hall, of

Clark University, Worcester, Mass.; S. A. Ellis, of Rochester, N. Y., and A. S. Draper, the Chairman, of Albany, N. Y.

The discussion was closed by Mr. Anderson, who offered the following resolution:

Resolved, That in the opinion of the Department of Superintendence the time has come when it is practicable to establish a professional standard for all teachers employed in City Public Schools, and the interests of Education require School Boards and Superintendents to establish a standard as an indispensable prerequisite to employment in the schools.

Referred to the Committee on Qualification of Teachers, appointed at the Washington meeting in 1889, and continued in 1890.

President James MacAlister presented the greetings of the Mayor of the city, and upon his suggestion the Department decided to call upon his honor in a body at the close of the Wednesday morning session.

The following Committee on Nomination of Officers for the ensuing year was then announced: W. E. Sheldon, of Massachusetts; J. H. Shinn, of Arkansas; C. W. Bardeen, of New York; N. C. Dougherty, of Illinois, and Aaron Gove, of Colorado.

Supt. S. T. Dutton was appointed to report the discussion on Commissioner Harris's paper.

Adjourned to meet at 8 o'clock, P.M.

EVENING SESSION.

The Department convened at 8 o'clock, President Draper in the chair.

Mr. W. E. Sheldon moved that the name of Mr. N. A. Calkins, Chairman of the Board of Trustees of the National Educational Association, be added to the Committee consisting of the President, Secretary, and Treasurer of the National Association, to report on the immediate publication of proceedings. Adopted unanimously.

Mr. Henry E. Edmonds, of the Board of Public Education of Philadelphia, presented the greetings of that body, and extended an invitation to members of the Department to attend a reception to be given in their honor on Thursday evening. The invitation was accepted, and the President authorized to make any necessary rearrangement of the programme to obviate the necessity of a regular meeting on that evening.

United States Commissioner W. T. Harris then read a paper on the National Educational Association, its Organization and Functions.

The subject was further discussed by Messrs. Gove, of Colorado; Greenwood, of Missouri; Hancock, of Ohio; Northrop, of Connecticut; Hall, of Massachusetts; White, of Ohio; Shinn, of Arkansas; Garrett, of Tennessee, and Mowry, of Massachusetts.

Secretary E. H. Cook, of the National Educational Association, made a number of important announcements in reference to the Toronto meeting.

Adjourned to meet at 10 o'clock on Wednesday.

SECOND DAY.—MORNING SESSION.

WEDNESDAY, *February* 25.

The Department convened at 10 o'clock, President Draper in the chair.

Superintendent Seaver, of Boston, read his report of the discussion on Mr. Anderson's paper on the Qualification and Supply of Teachers. Report approved.

A communication was received from the Union League of Philadelphia, inviting the members of the Department to visit their rooms, as they might find it convenient. The invitation was accepted by the President in behalf of the Department.

A communication was received from the Governor and the school authorities of Wisconsin, and the Mayor of Milwaukee, inviting the Department to meet in Milwaukee next year. Action deferred, and communication filed.

Supt. Eugene Bouton, Bridgeport, Conn., was appointed to report the morning discussions.

President James MacAlister, of Drexel Institute, Philadelphia, Pa., read a paper on Art Education in the Public Schools.

The subject was further discussed by Supt. Thos. M. Balliet, of Springfield, Mass., and Dr. J. H. Hoose, of the State Normal School, Cortland, N. Y.

Prof. Frank Aborn, Director of Drawing, Cleveland, Ohio, read a paper on the Highest Office of Drawing.

The subject was further discussed by Supt. Charles E. Gorton, of Yonkers, N. Y.

Inspector James L. Hughes, of Toronto, Canada, Chairman of the Local Executive Committee of the National Educational Association, was introduced. He assured the Department that Canada is being aroused on the approach of the meeting of the National Educational Association, and that however far Canada might be from political union with the United States, she was ready to engage in unrestricted reciprocity with this country in all matters of educational progress. He stated that arrangements were being made for the free passage of educational exhibits to the meeting of the Association, and for their free return, though the freedom of the Custom House might not be extended to the contents of the trunks of the ladies. Both the Government and the people of Canada extend a cordial welcome.

The President made a number of necessary announcements, and declared a recess until 3 P.M.

AFTERNOON SESSION.

The Department was called to order at 3 P.M., President Draper in the chair.

Supt. S. T. Dutton read his report of the discussion of Commissioner Harris's paper.

Supt. R. H. Pratt, of the Indian Schools, at Carlisle, Pa., was introduced. He spoke briefly in reference to the schools under his charge and of the education of Indian youth generally.

General Anderson, of Hampton, Virginia, was also introduced by the President. He spoke briefly upon the education of the negro.

The Committee on School Statistics, appointed one year ago, reported as follows:

TO THE DEPARTMENT OF SUPERINTENDENCE, NATIONAL EDUCATIONAL ASSOCIATION.

GENTLEMEN:—Your Committee, appointed at the last annual meeting, for the purpose of considering and reporting on the subject of School Statistics, beg leave to offer the following preliminary report, setting forth the results of their studies on the subject, and postponing for another meeting, or for the work of another committee, if it be your pleasure, the completion of the details of a scheme of statistics which will afford the data required for a comparative study of domestic and foreign educational systems.

Your Committee would first call attention to the object and purpose of collection of statistics, which they conceive to be the following:

Statistics reveal the nature and efficiency of the powers and forces involved in a process. Forces and powers are revealed in their results. Their results are of little moment, if dead results, except as they indicate what the living power has been and still is. In matters of education we inquire into the aims and purposes of the educative process and learn this by a quantitative study of the means employed and the results attained. It is evident, therefore, at the outset, that the quantities given by our statistical tables can have no significance except in connection with the quantitative elements involved. We pass over at once from the how many to the what kind. We seek, again, new quantitative data that may indicate the quality, but we never reach quantitative data that are significant in and for themselves.

Your Committee would suggest as the four principal heads under which school statistics may be grouped:

First. Attendance of Pupils.

Second. Course of Study.

Third. Teaching Forces and Appliances.

Fourth. Support—Revenue and Expenditures.

Under these four heads they would group the following details:

I.

Statistics of attendance should answer questions like the following—

(*a*) How many?

(*b*) How long?

(*c*) Who?

That is to say (1) How many pupils in the aggregate? (2) How many relatively to the entire population? (3) How many relatively to the population of the school age, say 5 to 21, 6 to 14, or some other period agreed upon? Then this item should be further defined in five items: (1) How many enrolled during the annual session of school? (2) How many as average belonging? (3) How many in actual average daily attendance?

(4) How many were dropped and afterwards readmitted? (5) The number of cases of tardiness.

Under the second item of attendance (How long) we wish the number of daily school sessions for the year and the hours of a school session, the length and hour of recesses and intermissions.

Under the third item of *Who* we include such items as—

(1) How many of each sex?
(2) How many at each year of age, and the average age?
(3) Race.
(4) How many born in the town or State where the school is situated?
(5) How many born in other parts of the same nation?
(6) How many born abroad?
(7) Occupations of parents.

II.

Under the second of our four chief heads we should ask for statistics regarding the course of study, and thus determine by this grade of schools as follows—

(*a*) Kindergarten.
(*b*) Primary and Grammar School.
(*c*) Secondary Education.
(*d*) Higher Education.

We should ask very carefully as to the relations of these items to the first class of items, especially age, sex, and average attendance.

The Primary and Grammar Schools are to be distinguished from the Secondary Schools by the following test: The introduction of Algebra, or of an ancient or modern language, marks the beginning of the secondary course of study. The higher course of study should be marked by analytic mathematics, or by logical and philosophical studies, or by advanced language studies.

The third general head, "The Teaching Forces and Appliances," includes—

(1) Buildings and accommodations.
(2) Size of schools under one principal teacher (number of pupils per teacher).
(3) Number of teachers.
(4) Supervision.
(5) Means of training teachers.
(6) Examinations of teachers.
(7) Methods of discipline and instruction used by teachers.

The fourth general head, "The Support of Schools," includes—

(1) REVENUE. Items of.
  (*a*) Receipts from State and local taxation.
  (*b*) Receipts from funds or productive property.
  (*c*) Receipts, if any, from tuition.
(2) EXPENDITURES.
  (*a*) For teachers' salaries, including supervision.
  (*b*) Incidentals, including janitor hire, fuel, apparatus and current expenses.
  (*c*) Permanent investments, including building and repairs.

Your Committee would call attention to the importance of a detailed discussion of the use to be made of these several items in studying the effective forces of educational systems and in comparing one with another. Such discussion is not here attempted, but is suggested as a proper subject of a supplementary report. Moreover, your Com-

mittee have observed the prime necessity for such a definition of the several items as to prevent misunderstanding. A description of the best methods of keeping and tabulating the several items would also be a very useful addition to such a report.

In dealing with reports, not merely reports from a foreign country, but with reports from different sections of the United States, your Committee has been impressed with the necessity of a glossary of terms used in tabulating statistics. There should be a careful collation of all terms and designations used here and abroad, and so minute a description given of the processes of ascertaining the data under the several heads, as to leave no doubt in the mind as to the exact meaning of each. Without this accurate information there can be no satisfactory comparative study of school systems.

All of which is respectfully submitted.

W. T. HARRIS.
JAS. MACALISTER.

The above report was received, approved, and again referred to the Committee for further elaboration and report at the next meeting, one year hence.

Mr. W. E. Sheldon presented a verbal report of the Committee on Publication, appointed at the New York meeting in 1890. He stated that arrangements were made at the St. Paul meeting of the National Association by which the proceedings, addresses, etc., of this Department are hereafter to appear in the regular volume issued by the Association.

Dr. N. A. Calkins, of the Executive Committee of the National Educational Association, to whom the matter of the immediate publication of the proceedings, papers, and discussions of the present meeting was referred, submitted the following report:

The matter submitted to the Executive Committee of the National Educational Association,* relating to the publication of the proceedings of the present meeting of the Department of Superintendence, prior to the publication in the volume of the General Proceedings of the National Educational Association for 1891, has been considered by this Committee. While there does not appear to be any special provision of authority for final action in this matter, the Committee, believing that an early publication of the proceedings of this meeting is important, and should be provided for, therefore submit the following proposition:

That the Executive Committee will provide for an early publication, in pamphlet form, of the proceedings of the Department of Superintendence, held in Philadelphia in February, 1891, provided that the members of this Department will pledge themselves to sustain such action and to advocate its approval by the Board of Directors of the National Educational Association at the meeting to be held at Toronto next July.

For the Committee,

N. A. CALKINS, *Chairman Board of Trustees.*

The report was unanimously approved.

The Committee on the Qualification of Teachers, appointed at the

* The Executive Committee for the ensuing year shall consist of the President, the Secretary, the Treasurer, the First Vice-President, and the President of Board of Trustees, with full power to act in all matters connected with the meeting for 1891. (Proceedings of St. Paul meeting, page 33.)

Washington meeting in 1889, and given further time at the New York meeting, submitted the following report:

Your Committee, to whom was referred the question of the qualifications for teachers' licenses in cities, respectfully report:

That it is the sense of the Department of Superintendence of the National Educational Association that the following qualifications should be required of all local candidates for positions as teachers:

1. In scholarship, the minimum requirement should be graduation from the local High School, or some institution of similar or higher rank, with such further examination as conditions may warrant or require.

2. In professional training, a course of at least one year in the principles and methods of education in a local training class or school, or in some similar institution officially recognized by the State Department of Public Instruction.

3. In experience, at least one year's satisfactory trial on provisional certificate before a permanent certificate is granted.

For candidates from without the city your Committee do not feel authorized, in the present unsettled and various standards of certification, to advise the employment of teachers below the rank of Principal, except upon examination by the City Superintendent.

No person should be licensed to teach who is not possessed of sound scholarship, and either has had professional training, or proved his fitness for his work by practical experience.

WM. H. MAXWELL.
W. E. SHELDON.

Report adopted.

The Committee on the Nomination of Officers reported as follows:

President—Henry Sabin, Des Moines, Iowa.
First Vice-President—V. C. Curtis, New Haven, Conn.
Second Vice-President—Oscar H. Cooper, Galveston, Tex.
Secretary—L. W. Day, Cleveland, Ohio.

The report was received, and the persons named elected.

Brooklyn, N. Y., was selected as the place of the next meeting of the Department.

The President declared a recess until 8 o'clock.

EVENING SESSION.

The Department convened at 8 o'clock, President Draper in the chair.

Chancellor George William Curtis, of the University of New York, delivered an address on Civil Service and the Public School.

President Draper, speaking for the members, conveyed to Mr. Curtis their thanks for the excellent address. This assurance was further emphasized by a rising vote of the Department.

General Thos. J. Morgan, Commissioner of Indian Affairs, was introduced by the President. He spoke briefly in relation to the education of the Indian and the management of Indian affairs.

Adjourned, to meet at 10 o'clock on Thursday.

THIRD DAY.—MORNING SESSION.

THURSDAY, *February* 26.

The Department was called to order by the President at 10 o'clock.

Superintendent Bouton presented his report of the discussion on Mr. MacAlister's and Mr. Aborn's papers. Report approved.

President MacAlister, on behalf of the University of Pennsylvania, extended an invitation to the Department to visit the psychological laboratory of that institution. Invitation accepted.

Commissioner Harris presented the following letter from the Swiss Legation, and urged the importance of definite action on the part of the Department.

LEGATION DE SUISSE AUX ETATS-UNIS.

WASHINGTON, D. C., *February* 23, 1891.

SIR :—The Board of Managers of the International Geography Congress, which is to convene in the city of Berne on the 10th of August next, has decided to organize for that occasion an exposition, of which the first section will comprise objects relating to the instruction of geography in schools, such as text-books and other appliances, methods, and programmes, the work of pupils, etc.

The Exposition will be opened on the 1st of August, and continue until the 15th of that month, and is open alike to individuals of all nations as to authorities.

Realizing the importance of securing as complete an exhibit as possible, the managers have requested the Department of Foreign Affairs of Switzerland, through its diplomatic and consular representatives abroad, to extend a cordial invitation to all parties likely to be interested in such an Exposition to participate in the display on that occasion.

This legation, inclosing herewith a number of copies of the official invitation for distribution, would therefore solicit your honor, as chief of the National Bureau of Education of the United States, kindly to bring this subject to the attention of the Superintendents of Education at their meeting in Philadelphia, to-morrow, the 24th inst., and in behalf of this legation express the hope that, wherever practicable, their several schools will participate in said Exhibition.

Thanking your honor for the interest you will be pleased to take in this matter, I have the honor to remain, Sir, with highest consideration,

THE SWISS MINISTER.

In his absence, (Signed) K. KLOSS, *Counsellor Swiss Legation.*

On motion of Mr. Harris, a committee of five was appointed to take charge of the whole matter in the most effective way. The committee consists of A. G. Lane, of Chicago, Ill.; C. W. Bardeen, of Syracuse, N. Y.; John Hancock, of Columbus, Ohio; John T. Prince, of Newtonville, Mass., and D. J. Waller, Jr., of Harrisburg, Pa.

Commissioner Harris, referring to the report on the Henry Barnard fund at the St. Paul meeting in July last, urged the members of the Department to make vigorous efforts in their respective localities to secure the necessary subscriptions at the earliest practicable time.

President MacAlister emphasized the suggestions and recommendations of Mr. Harris, and paid a high tribute to the life and work of Henry Barnard.

Mr. Bardeen urged the importance of the movement, stating that without such fund it will be impossible to bring the valuable publications of Mr. Barnard into accessible shape. He stated, also, that the Commissioner of Education would publish a full index of the work, which would render it invaluable.

Mr. Rickoff thought the raising of the fund was an act of simple justice which superintendents and teachers owed Mr. Barnard.

The matter was further discussed by Superintendent Buehrle, of Lancaster, Pa.; Professor S. G. Williams, of Cornell University; W. E. Sheldon, of Boston, Mass.; W. E. Anderson, of Milwaukee, Wis., and others. But no official action was taken by the Department.

Supt. W. H. Maxwell was appointed to report the discussions on the morning paper.

Supt. Oscar H. Cooper of Galveston, Tex., then read a paper on Universities and Schools.

The subject was further discussed by Pres. Harrison E. Webster, of Union College; Prof. S. G. Williams, of Cornell University; Pres. Nicholas Murray Butler, of the College for the Training of Teachers; Supt. Eugene Bouton; Geo. H. Martin and Pres. G. Stanley Hall, of Clark University.

The Committee on Resolutions submitted the following report:

The Department of Superintendence of the National Educational Association, at the mid-year meeting for 1891, have been received and entertained in the city of Philadelphia with a cordiality and a warmth of hospitality almost, if not quite, unprecedented; and amidst the inspiring surroundings in this historic place and by the sympathetic assistance of the citizens, this meeting has been one of the most profitable in the history of the Department.

For this result the thanks of the Department are due especially, and they are hereby tendered, to President James MacAlister for his thoughtful care in making all needful arrangements for the meeting, and for his constant contributions to its interests; to the Board of Education, the city authorities, and the heads of educational and other institutions here—too numerous to name especially—for our entertainment, and for the open doors which we have been invited and urged to enter, and to the railroads and hotels which have granted us reduced rates.

We also thank the President and officers of the Department for a programme of unusual interest, carried out with a promptness and effectiveness worthy of an educational Napoleon; and we thank the several lecturers and speakers for a rare educational treat.

As the result, in part, of our deliberations, we announce and place on record the following conclusions:

1. In our free Republic the State is merely the expression of the people's will, and not an external governmental force; and taxes are levied on property for the support of schools, because universal education is indispensable to the perpetuity of the State. Education, therefore, including our acquaintance with our national language, becomes the rightful inheritance of every child. It is the right and the duty of the State not

only to provide for this education, but also to insist that no child shall be deprived of this priceless heritage. The proper exercise of this right does not restrict the freedom of parents in the education of their children, except in the narrow limits of this necessary purpose.

2. Æsthetic culture, the appreciation of the beautiful in nature, in literature, in the truths of science, in art, is an end towards which all good teaching aims; and this love of the beautiful, while it softens the asperities of life, and contributes largely to the sum total of human happiness, tends also to moral beauty and the development of noble character, if this love is awakened by teachers efficient and thoroughly equipped.

3. To this end we urge the establishment of normal schools, colleges for the preparation of teachers, chairs of pedagogy in universities, courses of lectures in the science of teaching, educational periodicals, and all other means for the preparation of teachers for their work; and we desire that by these means the teachers of the land may, so far as possible, fit themselves for this noblest of all professions before entering it, and that we may none of us regard the preparation for this great duty fully accomplished, so long as little children come fresh from the hands of the Creator to be guided and developed, to a great extent, if not chiefly, under our care.

4. We welcome the tendency to establish widely over our country free public libraries, in view of their nature as an educational force in school and among the people; and especially we commend the wise foresight of those men of wealth who are administering their own estates by giving liberally while living to found or to endow such libraries, especially in their own towns, where they can witness and enjoy the results. And on behalf of our constituency, now truly national, we applaud also the munificence which is establishing so many schools and colleges that open a gate much broader than the needle's eye, not only for the rich man but for a long procession of the young, to the glories of the hereafter.

5. We most emphatically commend to the country the exposition of the principles of civil service as applying to the teachers in the Public Schools, to which we have listened; and we recommend the enactment of laws in the several States, requiring, from all candidates for the office of teacher in these schools, certificates of qualification from the State authorities. Such a law would not appoint teachers: it would simply decide what candidates should not receive appointment.

6. The revival of interest in education, the emulation of authors, and the rivalry of publishers, have within the past fifty years produced great improvements in school-books for both pupils and teachers. We are opposed to State publication of school-books, because such a custom would inevitably tend to destroy this healthy emulation; and because whatever useful and indispensable functions properly belong to the State as a corporate body, the preparation of books in a constantly growing science, and the writing of poetry, for example, are not among these functions. Experience has fully justified this belief.

7. Justice, as well as the best public service, requires the retirement and pensioning of teachers after a service of thirty years, and upon carefully devised conditions. We recommend the enactment of laws in the several States to permit and to regulate the retirement and pensioning of professional teachers.

A. P. MARBLE,
A. B. BLODGETT,
W. R. GARRETT,
HENRY SABIN,
Committee on Resolutions.

The President declared a recess until 3 P.M.

AFTERNOON SESSION.

President Draper called the Department to order at 3 o'clock.

A paper was read by State Superintendent Henry Sabin, of Iowa, on What Present Means are Available for the Preparation of Teachers for their Work?

Supt. W. E. Anderson was appointed to report the discussions on Mr. Sabin's paper.

President Draper, in a few appropriate words, introduced the President-elect of the Department, Henry Sabin, of Iowa, who, after a brief address, assumed the duties of his office.

Superintendent Sabin's paper was discussed by Superintendents Wm. H. Beach, of Madison, Wis., A. P. Marble, of Worcester, Mass.; J. M. Greenwood, of Kansas City, Mo.; Wm. N. Barringer, of Newark, N. J.; H. C. Missimer, of Erie, Pa.; and A. S. Draper, of Albany, N. Y.

On motion of President MacAlister, a rising vote of thanks was tendered the retiring president, Hon. A. S. Draper, for the prompt, efficient, and every way satisfactory manner in which for two years he had conducted the affairs of the Department, to which Mr. Draper made suitable response.

There being no further business claiming attention, the Department adjourned, to meet next year in Brooklyn, N. Y.

L. W. DAY, *Secretary.*

PAPERS AND DISCUSSIONS.

RECENT LEGISLATION UPON COMPULSORY EDUCATION IN ILLINOIS AND WISCONSIN.

BY N. C. DOUGHERTY, CITY SUPERINTENDENT, PEORIA, ILLINOIS.

THE attempts that have been made to secure the enactment of laws in these two States for the purpose of bringing all children into the schools, public or private, have excited an unusual degree of attention. Indeed, a stronger statement may be made. These attempts have created a degree of excitement seldom paralleled. It is fair to say that in both States violent prejudices have been aroused. Measures which were devised for the best purposes, and which received the almost unanimous support of the Legislatures to which they were submitted, have been denounced as intended to subvert the liberty of the citizen. An event so peculiar is certainly worthy of study. A careful examination of the case will bring to light some of the peculiarities of our American civilization. It will illustrate some of the political methods which it is hoped the extension of education may finally bring to an end. Such examination will also show, undoubtedly, the necessity of unifying energy in our system of education—an energy that will harmonize into one grand, intelligent, patriotic, and virtuous nation the millions of separate and discordant peoples with which the land is now filled.

In Illinois the necessity for a compulsory education law has long been felt. In his biennial report for the years 1871–2, Dr. Newton Bateman, then Superintendent of Public Instruction, urged upon the Legislature the necessity of a law compelling the attendance of children upon school, where such compulsion was necessary to secure them a reasonable education. He treated the matter under the head of the Educational Rights of Children. The Superintendent assumed that where the child is not sent to school, the child himself is the chief loser—the principal thing to be thought of is the securing of his rights. This is an eminently just view of the case.

But the Legislature did not at once respond to Dr. Bateman's recommendation. It was not until ten years after this recommendation was made that the subject was positively acted upon. In 1883 a law was passed for the purpose named, but it had been carefully drawn in such a way as to offend no one. The consequence was that almost no good was accom-

plished by it. There is no record of any case in which it was enforced so as to secure the attendance of a single child upon school. To the educational men it became apparent that the law had no worth. It was a dead letter upon the statute-book.

But in the year 1889 another law was passed of a very different character. It has the energy of an effective vitality. It provides that "Every person having under his control a child between the ages of seven and fourteen years shall annually cause such child to attend for at least sixteen weeks, at least eight weeks of which attendance shall be consecutive, some public day-school in the city, town, or district in which he resides, which time shall commence with the beginning of the first term of the school year, or as soon thereafter as due notice shall be served upon the person having such control, of his duty under this act." Proper penalties are provided for every neglect of such duty, consisting of a fine of not less than one, nor more than twenty dollars, and the guilty party is to stand committed until such fine and costs of suit are paid. But the person so neglecting may show, to the satisfaction of the Board of Education or of directors, that the child has attended for a like period of time a private day-school, approved by the Board of Education or of directors, of the city, town, or district in which such child resides; or that instruction has otherwise been given such child for a like period of time in the branches commonly taught in the public schools; or that he has already acquired the branches of learning taught in the public schools; or that his physical or mental condition, as declared by a competent physician, is such as to make his attendance upon school inexpedient, and in that case such penalties shall not be incurred. No school shall be regarded as a school under this act unless there shall be taught therein, in the English language, reading, writing, arithmetic, history of the United States, and geography.

The law also provides for the appointment, by the Board of Education or of directors, of a truant officer or officers, whose duty it shall be to inquire concerning all supposed violations of the law, and to enter complaint against all persons who shall appear to be guilty of such violations. It is also the duty of the truant officer to arrest children of a school-going age who habitually haunt public places and have no lawful occupation, and also truant children who absent themselves from school without leave, and to place them in charge of the teacher having charge of the public school which such children are by law entitled to attend.

In the Legislature the law was carefully considered and was entirely devoid of all partisan characteristics. Members of both the prominent political parties gave it their hearty support, in the belief that in thus doing they were rendering the State a noble service. Indeed, to all reasonable persons, the necessity for such a law was apparent. From the school statistics for the year 1888 it is reasonable to infer that there must have been, in the State of Illinois, 134,000 persons under sixteen years of age, and above

six, who were not attending school of any sort, public or private. The total number enrolled in the public schools for that year was 751,349, and in the private schools of the State, 100,465. The number of non-attendants was too large a fraction of the total number for the safety of the State and for the good of the people.

Certain general considerations undoubtedly had their effect upon the minds of the legislators. The fact that laws, compelling the attendance of children at school, have been enacted and are now in force among the most enlightened and freest nations of the earth; the obvious fact that in a republic nothing is more dangerous than ignorance in the populace; the demand of justice, that if a man is taxed without his own consent for the support of schools, for the avowed purpose of securing the universal intelligence of the people, he has a right to demand that the purpose of such taxation shall be carried out; these, and other similar considerations, undoubtedly influenced the minds of the members of both Houses. The result was that when the final vote came to be taken the measure encountered in the Senate not one opponent; and in the House, of 153 members, there were but six votes against it.

The Bennett Law was prepared by Robert Luscum, Assistant City Attorney of Milwaukee, at the request of a committee appointed by a German school society. I think Mr. Luscum was familiar with the action of the Schoolmasters' Club, in Illinois, and was guided in the preparation of his bill by the one introduced in the Legislature of that State. The bill was introduced in the Assembly of the Wisconsin Legislature by Hon. Michael Bennett, an Irish Catholic, Chairman of the Committee on Education. It did not receive much consideration, except by the committees on education, and there is no record that there was a vote against it in either branch.

And what has been the result of the operation of these laws thus far? I speak more especially for Illinois, as being better acquainted with the facts in that State. In the city of Chicago, during the year ending July, 1890, 10,000 children, or thereabouts, were taken from the streets during the school months and placed in the schools. In other parts of the State similar results were attained. Briefly, it may be said that the number of children thus gathered into the schools of the towns and country districts of the State, outside of Chicago, is equal to those reported in that city. And it ought not to be forgotten that this large gain to the schools was accomplished without friction, and with almost no employment of force. In Chicago, in Springfield, and in other cities, we learn that there have been no prosecutions.

Another fact is worth reciting here. Of the 10,000 children placed in the schools in Chicago, 1,500 were placed in private or parochial schools. Similar results are known to have followed in other parts of the State, but the record of them has not been so accurately kept. This has been in

exact accord with the spirit of the law. It was not intended to be hurtful to the private or parochial schools. Its object was to promote education, to secure to children their dearest and most valuable rights.

But the subject may be regarded from another standpoint. Taking the statistics of the entire State, we have a gain in the enrolment in the public schools for the year ending June, 1890, over the preceding year, of 16,454. The private schools for the same time show a gain of 6,729 over the previous year. For the year 1888 to 1889, the gain in the public school enrolment was 4,410 ; and in the private schools, for the same time, there was an absolute loss. And a record of attendance shows a still more marked improvement than that of enrolment. In the year ending June, 1889, the number of days of attendance on the public schools by pupils in this State was 80,041,817. In the year closing in June, 1890, the total number of days of attendance reached 84,659,664, or a gain of more than 4,600,000 of days of attendance during the last year over the preceding. The gain of 1889 over 1888 amounted to only 600,000 school days. The gain of 1890 over 1889 was, therefore, more than seven times as great as that of the preceding year, and only the compulsory education law can account for the difference.

It ought not to be forgotten that all this good was accomplished in the face of constant and irritating opposition. No effort was spared by the enemies of the law to make it odious in the eyes of the people. Eminent lawyers were employed, wherever a prosecution was begun, to denounce the law and to defend the parties prosecuted. There seemed to be no sparing of expense in carrying on these operations. And yet, notwithstanding all this hostility, the magnificent results already named were achieved.

We have enumerated some of the pleasant and encouraging results as viewed from one standpoint. But the enactment of the law, as already intimated, was followed by another class of consequences. A few of the managers of parochial schools were disturbed at the prospect of being required to teach English in their institutions. Soon after the passage of the law, certain Lutheran ministers connected with the Missouri Synod, so-called, began to criticise it, and they kept up their work assiduously. Certain politicians, being very desirous of gaining an ascendency in the State, saw in this their opportunity. They immediately began to encourage the Lutheran malcontents to persist in their criticisms. Many Lutherans were disposed to take a reasonable view of the matter ; but the politicians, and the more unreasonable among their own number, would not permit them to remain neutral. The agitation at first was carried on mostly under cover. The general public, for a time, knew very little of it. An eminent Democratic leader advised against making the repeal of the law a plank in the State platform, but urged the party to utilize the opposition to it, wherever they could, in different localities. In this way

a perfectly organized system was developed, and was put into vigorous operation.

In the meantime, the Republican party was disinclined to take up the school issue, and its State platform on the subject was of the milk-and-water type. The campaign was under the management of a man whose contempt for schools and literary people is only exceeded by their contempt for him. This man regarded the office of State Superintendent as only a thing to trade upon. For the sake of securing votes for members of the Legislature, he gave it to be distinctly understood that he was willing to sacrifice the candidate for the State Superintendency. He directed the Republican orators not to refer to the compulsory education law in their speeches. But, as the months rolled on, the strength of the opposition to the law became more and more manifest, and some slight effort was made to support it. The president of this Department, Judge Draper, delivered at Peoria a convincing and inspiring address in support of the law. The Schoolmasters' Club, and other educational associations, spoke out in ringing tones upon the subject, and for the last three weeks of the campaign there was something done in the political arena in behalf of the schools. But these efforts were represented as the mere makeshift of a party reduced to extremities, and thousands upon thousands of the good citizens of the State were made to believe that there was no danger to the free-school system or the compulsory education law. But the opponents of the law kept up their movements vigorously. On the Sunday preceding the election violent addresses were made in all the German Lutheran churches, as well as in some of the German Catholic churches, and the preachers, with large numbers of their congregations, were detailed to act as ticket pedlers at the polls. In these pulpit harangues the simple-minded people were made to believe that the law menaced their personal liberty, that the effect of it would be to make their further residence in America intolerable. From the political platform also the most absurd appeals were made. Demagogues, who cared neither for God nor religion, declared that this measure would make it impossible for the people to worship according to their inherited faith. Every possible influence was brought to bear to secure votes. Candidates for the Legislature were secretly pledged against the law.

Soon after the publication of the law in Wisconsin, the German Lutheran Synod passed resolutions condemning it, and pledging the Lutheran Church to an uncompromised repeal of it. Soon after this action by the German Lutherans, there appeared the manifesto of the three German Catholic prelates of the State. Subsequent to this there was a meeting of the German Catholic societies, which not only passed resolutions demanding the repeal of the law, but denounced Governor Hoard as an enemy of the church schools and German customs. The next organized attack on the law came from a joint meeting of German Lutherans and German Catholics,

with a sprinkling of devout Democratic politicians. The results of the election indicate very clearly that both the German Lutheran and the German Catholic churches of the State worked and voted almost to a man in support of the Democratic ticket.

The great political revolution which appears to have swept over the whole country also had its effect in the same direction in both these States. These causes operating together produced the result. Governor Hoard in Wisconsin and Dr. Edwards in Illinois were defeated. They were noble, conscientious men. They were men who had the courage of their convictions. Each could have been elected by a large majority had he been willing to betray the right of the State or sacrifice the right of the child to an education in the English language. Each preferred defeat to such a betrayal of interests committed to his care. They went down as sacrifices to race prejudice, and their names will ever be linked together and honored wherever freedom has a votary or liberty a home. But this result ought not to be taken as the expression of the enlightened public sentiment of the State. Thousands of persons were deceived into the belief that their personal liberty was threatened by law—a suggestion for which there was not a shadow of foundation. If the law compelled the children to learn certain dogmas, to accept certain beliefs, whether in religion or politics or social science, it might be reasonably objected to as restricting the liberty of the individual. But the compulsion is not of this kind. The compulsory education law merely compels the recognition of the rights of children to an amount of intelligence that will enable them to make useful and successful citizens, to secure their own happiness and to do good in the world. The compulsion that dictates the belief of a man is a trammel upon his mental freedom; but the compulsion that prevents one human being from keeping another human being in ignorance really promotes an enlargement of individual liberty. If these laws could be executed in a right spirit, the amount of individual freedom in these States would be immensely enlarged by their agency.

Thousands of well-meaning persons, as already stated, believed that there was really no danger, either to the school system or the compulsory law. The parties hostile to the law were intensely and furiously active. Most of its friends, trusting to the inherent justice of their cause, put forth little effort. There are not wanting indications that if the same question could have been voted upon again as soon as the result of the 4th of November became known, that result would have been emphatically reversed.

One of the lamentable results of the opposition to the law is that for the time being its moral influence is diminished. Whatever legislation may be enacted, it will require strong and vigorous effort on the part of the friends of free schools to restore to these institutions their full measure of beneficent influence.

There is, however, inspiration in the thought that the public sentiment among educational men remains loyal to the great principle of the right of every child to an education. At the meeting of the State Teachers' Association, held in December, 1890, the largest and most enthusiastic ever held in the State of Illinois, no sentiment uttered by any of the speakers elicited a tithe of the applause that followed every approving reference to the compulsory education law. Bishop Spaulding, in the course of his masterly address, expressed his approval of it, and the vast audience, filling every square foot of the great Hall of Representatives, broke forth into tumultuous and long-continued cheering. And, near the close of the meeting, the following out-spoken resolution was adopted with entire unanimity:

Resolved, That the law concerning the education of children, known as the compulsory education law, which went into effect July 1, 1889, was a measure calculated to promote intelligence, humanity, and personal liberty; that such a measure is necessary to protect the free institutions of this country against the assaults of demagogues and dogmatists; that its purpose was to increase the amount of intelligence and personal independence among our people; that the effects produced by its enactment and right enforcement have been in a high degree salutary; that the rate of increase in attendance in our schools since its enactment, compared with former years, has been more than doubled; that the abuses that have risen under it have been very light, compared with those arising under almost any other law, and that the law, therefore, ought not to be repealed or so amended as to lessen its efficiency.

What the final action of the Legislature upon the subject will be, it is impossible at this writing to determine. Undoubtedly a strong effort will be made for a complete repeal, but it is safe to say that such a proposition will not prevail. The friends of the law in the Legislature are very resolute. It is hoped that they will be able to prevent any serious impairment of the efficacy of the statute.

The danger is that the politicians may be frightened into temporizing by the fear of losing the ignorant vote, but Governor Fifer is himself a product of the public schools, and has the courage of his convictions.

We have been accustomed to claim for our beloved country a proud preëminence among the nations of the earth. Our resources, our geographical position, and, above all, our institutions, put us in the lead of all the peoples in the world in respect to the privileges that we enjoy. We have not the antiquity of some of the other nationalities, but we are old enough to have produced a Washington and a Lincoln. We are old enough to have wrought out a system of government which is the admiration of all lovers of liberty in all lands.

But the thought of what has gone into our national life gives us the basis for our most exalted estimate of the value of our country to-day. For that in it which we cherish most stands for tears and toils and prayers

and sacrifices and deaths. The blood of our ancestors is in it. The blood of dear ones, into whose faces we have looked, whose hands we have clasped and with whom we have walked in loving fellowship, is a part of this glorious entity that we call our country. We put value on possessions according to their cost. Can we put too high a value on that which has come to us at the cost of so much unselfish suffering? Tennyson, in one of his poems, has expressed a doubt as to whether elevated sentiments and heroic living can be long maintained without the shock of war—whether in times of peace men do not become mercantile in their habits and selfish in their feelings, and leave the more manly virtues to stagnate and rot into decay. We have lived through one century of government, and the record made is a magnificent one. To the challenge sent out to us from our revolutionary sires and the framers of the Constitution, "Watchman, what of the night?" we have answered back, "All is well."

But is it certain that this liberty of ours, for which men but a few years since carried muskets and died carrying them, for which they forded streams and waded through swamps and climbed mountains, and met all the exposure of the picket lines, and stormed forts and faced the belching mouth of cannon, and made the last sacrifice that it is possible for even the most devoted to make for their country—is it certain that this liberty, which has cost so much, is to go on in a kind of inevitable perpetuation? that these free institutions are to remain free institutions through their own inherent virtue? that this cherished self-government is to need no looking after, in order to keep it moving along the lines on which our fathers projected it? Are not the conditions even now somewhat changed? Look at the large part played in the management of political affairs by the selfish and disreputable elements of society! See how those ignorant of our country's language, of its history, of its true spirit, of its great purpose, were welded into one mass and thrown against the progress of American civilization, as was done in Illinois and Wisconsin in November! Shall we not insist that virtue, diligently promoted, that right laws, administered and legally obeyed, that intelligence, universally diffused, are essential to the prosperity and perpetuity of our nation? For three-quarters of a century everybody could see just the point of peril to national unity and national life, and when the shock came it was not a surprise. With the existing condition which I have attempted to point out this morning, can we not see wherein the future strain is likely to become excessive; and shall we not, as a wise people, strive to make strong that which within us is weak—to raise and illumine that which is dark?

The principle on which the compulsory legislation of Wisconsin and Illinois is based—the right of a child to an elementary education in the language of the nation, and the duty of the State to secure him that right—is not dead. It lives in the Declaration of Independence, it lives in every

page of our country's history, and, having within it the germ of undying vigor, will continue to live—

Till the sun grows cold,
And the stars are old,
And the leaves of the judgment-book unfold.

DISCUSSION.

[Reported by Supt. J. M. Greenwood, Kansas City, Mo.]

Mr. Hancock, of Ohio, said: When he reflected on the fact that his State had no State Normal Schools, nor any kind of supervision for her ungraded schools, he felt abashed in the presence of educational representatives of States more happily situated. But in the matter of compulsory education he believed the State was entitled to some credit. She has a compulsory law that compels; and this law was passed in 1889 by the unanimous vote of both branches of the General Assembly, having, consequently, both the great political parties at its back. And better still, in its enforcement there has been no division of sentiment on religious lines, all denominations, with rare individual exceptions, giving it a hearty support.

The age for compulsory attendance, in the law as originally passed, was of youth between eight and fourteen years, including those between fourteen and sixteen who cannot read and write; and the time for each year, sixteen weeks in the country schools and twenty weeks in the city and village schools. But at the meeting of the Legislature in 1890, an advance step was taken scarcely less important than the passage of the original law itself. This makes attendance compulsory on the part of all youth between eight and sixteen years, not engaged in some regular employment, for the whole time the schools of the several districts may be in session. Under this provision youth must, after the original compulsory period has been completed, either continue in school or go to work. The moral results of this new feature of the law will undoubtedly be great.

All amendments to the law, as weak places have manifested themselves in its execution, have been made with the purpose of strengthening these weak places, and with the greatest unanimity among our law-makers.

The act is not yet perfect, for it requires time to perfect a law of such large application; but if public opinion continues to hold as now—and there are no indications of a change—we shall experience no great difficulty in securing the needed amendatory legislation.

The law provides for the supply of the necessary clothing for the children of parents too poor to make the provision themselves. But the authority to do this is now vested in the trustees of townships, and their slowness to act—or neglect to act at all—leads to great embarrassment in

the execution of the law. It has, therefore, been concluded that it is best to have this authority transferred to the boards of education, and this is likely to be done by the present Legislature.

Ohio has before had compulsory laws, but they failed because no one was specially charged with their execution. The truant officer of the present law is its essential factor; upon him are imposed grave duties, the discharge of which requires qualifications above those required of the ordinary policeman. He must be possessed of a fair intelligence; his heart must be in his work; he must have an abundance of tact, and must be humane, patient, and courageous. And it may be truthfully added that the school boards of our State, as a rule, have acted in the full light of their responsibilities, and have in most cases appointed men well fitted for their places.

This law means, in Ohio, as we believe, that no boy or girl hereafter born within her borders shall ever be permitted to grow up without having received at least an elementary education, or without the advantages of a definite moral training, which, more than intellectual culture, will serve to save to good citizenship the waifs and outcasts of society.

MR. JOHN MACDONALD, of Topeka, Kansas: The question now before the American people is clearly defined, and we may as well meet it. Has the State the right to insist that the instruction given in its schools must be in the English language? Bands of foreigners in Wisconsin and elsewhere are making the unpatriotic demand that the language in which instruction shall be given must be determined by the community for itself. This un-American demand must and will be resisted. We have thrown wide open the doors of the Republic, and have invited all who thirst for political freedom to accept citizenship; but it is for the nation to lay down the conditions of citizenship, and the foreign-born citizen should accept these conditions in good faith. Politicians may be deluded by temporary victories, but educational philosophers can afford to wait for the right to prevail, for the people will surely on this question be again clothed and in their right mind.

In Kansas we have had for many years a general compulsory law, but when large numbers of Mennonites settled in our State some years ago, and began to use their native language exclusively in schools organized under the laws of the State, the Legislature passed a law requiring that all the instruction given in the public schools should be in the English language. That part of our compulsory law is well enforced, and has led to no discontent or mutiny, but has been accepted as a reasonable requirement.

You have doubtless observed that in European countries the tendency is to disintegration; in our own country, to centralization. In educational matters I believe in centralization to this extent, that the federal govern-

ment should have something to say as to what is taught or not taught in the schools of the land. The State is greater than the individual, and the nation is greater than the State.

State Superintendent WELLS, of Madison, Wisconsin, addressed the chair for the purpose of raising the issue, namely, whether it be not a legitimate question to discuss the educational results accomplished under the compulsory and the non-compulsory systems.

He challenged the arguments used to prove the inefficiency of the school system of Wisconsin, claiming that the situation had been exaggerated to prove the necessity of drastic measures. He said that the apparent discrepancy between the total school population and the annual enrolment was accounted for by the extreme limits of enumeration, the legal school age including all persons between the ages of four and twenty. The majority of pupils leave school at fourteen or fifteen, while the average age of all high-school graduates was probably under seventeen. If these did not thereafter enter school, they were counted until they were twenty-one among those not reached by the schools. More than one-half of those under the age of six were not enrolled. The records show that seven-eighths of those between seven and fourteen attend school a portion of the year. Again, the number reported attending private and parochial schools is known to be less than one-fourth of the actual attendance. Considering these facts it was evident that the schools were reasonably efficient.

He affirmed that the effect of the Bennett law upon attendance had been greatly overstated. The reported increase was not so much due to a larger attendance as to greater care and thoroughness in securing the returns. One county, widely quoted as having increased its attendance 1,099 under the influence of the Bennett law, had instead an actual decrease in the enrolment of 123, and more than 23,000 days' attendance, as shown by the superintendent's report on file in the Department.

At this point the speaker was interrupted by a sharp cross-fire of questions relating to the effect of the Bennett law as an issue in the late political campaign. While admitting that it was a large factor, he claimed that it was only one of several which contributed powerfully to the result.

COMPULSORY EDUCATION IN MASSACHUSETTS.

BY GEORGE H. MARTIN, AGENT MASSACHUSETTS BOARD OF EDUCATION.

Compulsory education began under more favorable conditions and has had a more continuous, natural, and successful development in Massachusetts than in any other State of the Union, or in any other country in the world.

The conditions were the following:

A homogeneous and well-to-do people, coming in considerable numbers and settling somewhat close together;

This people, by a pious indirection, self-governing from the beginning, subject to no proprietor, patroon, foreign corporation, or royal governor, scarcely subject even to a king;

A central representative government having original and supreme jurisdiction, by which local autonomy was rigidly circumscribed;

A considerable body of university educated men, clergymen, and others;

A suffrage restriction of such a character as to give to this body controlling influence. Had there been a property qualification for suffrage instead of an ecclesiastical one, the free school system would have been as long in coming in Massachusetts as it was in the other colonies;

Civil units for all local purposes instead of ecclesiastical ones, towns and not parishes;

A form of church polity democratic, corresponding to the civil polity.

Under these conditions the foundations of an educational system were laid in the world-renowned law of 1642, which decreed that all the children should be brought up to learning and labor, that they should be taught to read and understand the principles of religion and the capital laws of the country.

If there was at that time any such law in existence anywhere I have found no evidence of it. Other nations, drawing their inspiration from the same source, the letters and sermons of Luther, had aimed, at most, only at universal opportunity for education. This law aimed at universal education, and it made specific provision for its own execution. And it was executed. The quaintly curious records of the towns tell of the appointment of special officers to go from house to house and see that the children were put to learning and labor, or they prescribed days when all the children and apprentices should appear at the minister's to be measured as to their attainments.

The more we study this law the more it impresses us. The position those early legislators took was broad, logical, tenable, wise, whether we view it as churchmen or statesmen. The men who made the law were both. It dealt directly with parents. It prescribed no means nor methods, and so neither restricted parental rights nor interfered with parental choices. It put no new obligation on the parent, but, for social and political ends, sought to enforce a preëxisting and natural obligation.

Thus it appealed to the judgment and the conscience of all thinking and right-minded men; and most of the early settlers were such men. So the law went out to do its work among a people largely in sympathy with it, and under controlling influences in church and state wholly in sympathy with it.

The principle became a part of the tissue and fibre of Massachusetts thought. Because of this, and because it was so reasonable, men of various faiths and various nationalities, who subsequently came into the State, imbibed the doctrine as with the atmosphere, and to-day the more heterogeneous people of Massachusetts are as firm supporters of the doctrine of compulsory education as were the more homogeneous people of two hundred and fifty years ago.

All subsequent school legislation finds in this its sanction, and holds the relation to it of means to end. Here is the secret of the popularity and strength of all later compulsory enactments.

Having made the obligation general, the next step was to furnish the parents with suitable means to meet it. Hence the compulsory school law of 1647, which required towns of fifty families to support a reading and writing school, and towns of a hundred families to support a fitting school for college. The manner of supporting the school was left for each town to determine for itself.

This law was unique in that it was made by the people for the people. The schools established under it were public schools. They were set up by vote of the town. The town chose the master, and fixed his salary, in open town-meeting, or by its selectmen, under definite instructions. The town supported the school wholly or in part, sometimes by granting fixed revenues from leased lands or invested funds, sometimes by direct tax, often by both. In many towns, at first, those parents who could afford to pay tuition fees were expected to do so; but to the children of the poor, and, in many towns, to every child, the school-house door opened as freely as it does to-day. This was no less true of the Latin school than of the English.

Mr. Motley, and some recent writers on American history, have thrown out the suggestion, or directly asserted, that the Massachusetts people learned their school lesson from Holland. There is no ground for the assumption. There is not the faintest trace of Dutch influence in the early school history of Massachusetts. The Plymouth colonists, who had lived in Holland, made no public provision for schools for fifty years after their settlement. Nor could the Dutch settlers of Manhattan give much instruction to them, for in 1659 the burghers of New Amsterdam, in a petition to their lords and masters, the Dutch West India Company, ask for a man who can teach the children Latin, "for which," they say, plaintively, "there are no means nearer than Boston."

Private bequests and public grants, as well as town votes, express the sentiment, and often repeat the phraseology of English instruments founding or aiding English schools. These early schools were "a well of English undefyled."

An analysis of these two earliest laws discloses the following principles, which are the foundation of all subsequent legislation and history:

1. The universal education of youth is essential to the well-being of the State.

2. The obligation to furnish this education rests primarily on the parent.

3. The State has a right to enforce this obligation.

4. The State may fix a standard, which shall determine the kind and the minimum amount of education needed.

5. Public money, raised by general tax, may be used to provide such education as the State requires. The tax may be general, though the attendance is not.

6. Education higher than the rudiments may be supplied by the State.

Whatever we may think of the principles, there they were.

The compulsory school law of 1647 has undergone various modifications, some broadening its scope, some narrowing it. It remained on the statute book unchanged for a hundred and forty-two years. Then the standard was lowered. Instead of a school all the year round, in small towns a six-months school was allowed, or several schools, aggregating six months. Instead of one hundred families, two hundred was made the minimum number for supporting the Latin school. The change of a single word released one hundred and twenty towns from the obligation, which had been on them for nearly a hundred and fifty years, to keep open a free path to the university. In later years the limit has been still further raised. But this is a significant fact, that, with the exception of a few years, there has never been a time in the history of Massachusetts when a classical education has not been free in towns having 2,500 inhabitants.

Whereas the early laws applied only to towns having fifty or more families, in 1839 all towns were placed under the same obligations. In 1859 all common schools were required to be kept six months, the high schools already being required to keep ten months. Six months is now the legal minimum, but all the schools in the State were kept last year an average length of nearly nine months.

By existing laws towns having 10,000 inhabitants must maintain free evening schools, and any city having 5,000 inhabitants must maintain a free evening high-school, if fifty persons of suitable age and requirements ask for it. In these evening schools there were last year under instruction about 25,000 persons.

Compulsory legislation dealt next with the qualifications of teachers, requiring certificates of moral and intellectual fitness. Every schoolmaster even of an elementary school must be a graduate of some college or university, or, in lieu of this, must produce a certificate of qualifications from a learned minister well skilled in the Greek and Latin languages. These requirements have been modified from time to time, weakening on the intellectual side, while maintaining the moral standard at its highest elevation.

The third step in the development of the system was in the direction of

supervision. In 1789 the selectmen and ministers, or a special committee, were directed to visit the schools at least once in six months, to inquire into their regulation and discipline, and the proficiency of the scholars. We observe that the two important functions of supervision, inspection, and examination were distinguished thus early.

The hint contained in the phrase, "or other persons especially chosen for the purpose," was quickly acted on, and in all the larger towns and in many of the smaller ones the school committee became a separate and permanent body. This law made regular inspection by public officers obligatory; the choice of officers was optional. Later, in 1826, this option was withdrawn and the specialization of functions was required. The town school committee, with almost absolute control of school affairs, was made a distinct feature of the compulsory system. At the same time the amount of supervision was increased by requiring monthly instead of semi-annual visits.

Compulsory taxation for the support of the schools required by law to be kept was the next step. This appears first upon the statute book in 1827. For one hundred and eighty years it had been optional with the towns to charge tuition fees, but the option had not been exercised for generations. In my researches among the local records in the State I have found no mention of fees later than 1767, and that only in a single town. Few towns required them later than 1700, and many had never required them.

Legislation here, as everywhere else in Massachusetts school history, only crystallized into statutes practices which had become well-nigh universal. There were schools almost everywhere before the law made them compulsory. School districts and female teachers were common a hundred years before the laws recognized their existence. School committees had been chosen long before the State required supervision, and now the obligation to support the public schools by general tax only embodies a public sentiment which had long been universal.

A variety of conditions peculiar to New England tended to make the schools sooner or later wholly free. Common lands available as sources of town income were gradually sold. Population increased more rapidly than the income from testamentary property, so that the needs of the schools more and more outran their fixed revenues. Private benevolence lacked incentive when law made schools compulsory, and a town rate could be depended on to provide the means for their support. Tuition fees from the rich and free tuition for the poor made class distinction too prominent for a new society where in church and state all were equal. Support by town tax was simpler, easier and more uniform than by any other method. All these causes peculiar to New England colonial conditions tended to change the English schools of the earliest period to the American schools as we know them to-day. The change came more rapidly in some places than in others. Each community worked out its own problem in its own

way, until all at last reached the same result under the law which made support by town rate permissible but not compulsory.

The crowning feature in the legislation, by which the schools were made free to all, is the law of 1884, which required towns to provide at public expense all text-books and supplies needed in the schools. Along this line, too, the process of evolution is interesting. At first the town paid only for the salary of the teacher, wholly or in part. The master furnished the school-house, and the children brought the firewood and the books. The towns early relieved the teacher by building public school-houses, and before many years they relieved the parents by supplying the fuel. Free text-books are as legitimate objects of public expenditure as firewood, free school-houses, or free teachers. No line can be drawn between them which is not an arbitrary one. Massachusetts has drawn all the lines, one at a time, and has rubbed them all out. To one familiar with history, the modern outcries against free text-books seem like echoes from the acrimonious debates in Massachusetts town meetings, as one by one the burdens of school support have been shifted from the parent to the public.

All the State now asks of the parent is that he furnish the children. Nor is she strenuous as to quality. She provides at public expense for the education of the deaf, the dumb, and the blind. She does not even insist upon brains, for in the ample compass of her beneficence she waits upon the slow-dawning intelligence of the idiotic and the feeble-minded. For these defective classes she provides free transportation to day-schools, and free board if the schools are far from home. This is not done as a charity, but for rich and poor alike, under the general provision for public schools, that the school opportunities shall be ample for all the children.

The compulsory system assumed its modern form first in 1852, by the requirement that all children between the ages of eight and fourteen years should attend some public school at least twelve weeks in each year. It is important to notice that, in Massachusetts, this was not so much a new law as a rehabilitation of the ancient statute. It involved no new principle. It only provided a new method of enforcing the traditional principle, that every child should be educated. The selectmen could no longer keep a vigilant eye upon their neighbors to see that they brought up their children to learning and labor. The public school registers, in connection with an annual school census, might take the place of this personal oversight and inspection. Non-attendance at the public schools was made *prima facie* evidence of parental neglect. But the parent was as free as ever to exercise his preference in the choice of means of educating; only the burden of proof was on him to show that he was doing his duty by his child. If the child was otherwise provided with the means of education, the new law exempted the parent from its penalty. This left the way clear for home instruction and the private schools.

That the new law was evolutionary rather than revolutionary in its character is evidenced by the fact that its enactment did not produce a ripple on the current of public thought. It did not even originate as a government measure; that is, it did not emanate from the Board of Education. Horace Mann, in one of his later reports, five years before, had eloquently pleaded for such a new departure, but the initiative was taken by a member of the House of Representatives from one of the smallest of the rural towns—towns where the evils of non-attendance were then most conspicuous.

This law was weak at several points. Its enforcement was in the hands of local boards, and the town treasurers were made prosecuting officers—good men, but not especially interested in schools, and not likely to entangle themselves voluntarily in the meshes of the law. There were several underground passages by which parents might retreat. Physical disability of the child or the poverty of the parent might exempt from the penalty. And "otherwise furnished with the means of education" has proved so wide an avenue that a local judge drove not only the proverbial "coach and four" through the law, but a whole non-English-teaching parochial school.

Subsequent legislation has broadened and strengthened the law. In 1873, when other States were passing their first compulsory laws, Massachusetts, as if to maintain her ancient lead, extended her required school time from twelve weeks to twenty weeks, and last year it was extended to thirty weeks where the schools keep so long; and an order is now in the Legislature to require school attendance as long as the public schools are in session.

Poverty is no longer a valid excuse for not complying with the law. The public school standard is made the universal standard. Children may attend private schools, but they must attend at least thirty weeks in the year, and the private school must be approved by the school committee. It may be so approved by the school committee only when the committee is satisfied that the instruction is in all the branches required to be taught in the public schools—is in English in all these branches, and is equal in thoroughness and efficiency to the instruction in the public schools of the locality, and that the pupils make equal progress with the public school pupils. The loose phrase, "otherwise provided with the means of education," has been changed to "otherwise instructed in the branches required to be taught in the public schools for a like period of time."

These laws are supplemented by the truancy legislation of the State, and by the acts concerning the employment of children. Every town is required to make suitable provision for the confinement and instruction of truants. Every local school board is required to appoint truant officers, who are made prosecuting officers; and the county commissioners, on petition of three towns, are required to provide county truant schools.

The whole truancy legislation has been strengthened by the recent action of the Supreme Court, issuing against a recalcitrant board of county commissioners a writ of peremptory mandamus commanding them to proceed at once to provide a truant school.

The employment of children under fourteen is practically forbidden, and minors who cannot read and write in the English language may not be employed if they have lived for a year where public evening schools are maintained, and are not regular attendants at such schools.

It is evident that the legislation is ample to secure to every child in the State a good English education, including not only reading, writing, and arithmetic, but grammar, geography, United States history, temperance, physiology, and industrial drawing. The enforcement of this legislation is in the hands of local school boards, and is efficient where they do their duty—most efficient where there are superintendents.

Reviewing the evolutionary process from the beginning, we note that there have been six steps—compulsory education, compulsory schools, compulsory certification of teachers, compulsory supervision, compulsory taxation, compulsory attendance; and it seems that Massachusetts took each of these steps in advance of the other States—a little in advance of her sister States in New England, far in advance of all the others.

It is evident that at no point in the later history of Massachusetts school legislation has any new principle been introduced or any violent strain put upon the old ones. The multiplied statutes of to-day are only the expansion of the laws of 1642 and 1647, made necessary by the social development of the State.

Public sentiment is a unit in favor of universal education, and of the amplest legislation to secure it. The action of Boston in 1817 expressed a feeling which has always been dominant, and never more so than to-day. When the good people of that town discovered that more than two hundred children under seven years of age did not go to school, there being no public provision for them, they gathered in Faneuil Hall and rocked that old Cradle of Liberty as it had been rocked in revolutionary days; and, in spite of the opposition of a few social magnates, voted to establish twenty public primary schools, which in eight years increased to fifty.

When, in 1820, it was found that through the disintegrating influence of the district system the common schools were languishing, there was a revival of education which has gone on with accelerating force until the present time.

The strength of this public sentiment is shown in the attitude of the courts, and in the amount of money raised for public schools. In the colonial days the magistrates and the grand juries were unrelenting in their pressure upon neglectful parents and slow-moving towns. And, throughout the history, the decisions of the higher courts have been in-

variably in favor of the most liberal interpretation of the laws on the side of the public schools.

On the money side the people of the State last year spent on their public schools eight and a quarter millions of dollars,—$22.38 for each child between five and fifteen.

The question which comes to us most frequently is: What has the Massachusetts system of compulsory education accomplished? Such a question cannot be fully answered. The forces at work in modern society are too many and too subtle for minute and exact analysis. The object which the founders of the system had in view was to make intelligent and upright citizens of the civil community, and loyal subjects of the kingdom of God. How far the past and present character of the Massachusetts people has justified the efforts of the fathers, I will not attempt to say.

But there are some specific facts which may justly be attributed to the system. By the last report of the United States Commissioner of Education, the school attendance at public schools alone throughout the State averaged 151 days for every child between the ages of six and fourteen,—in this leading all the States. Illiteracy, so far as the persons born of native parents are concerned, has been practically wiped out, only one in 714 of such persons being unable to read and write. And the same census found in the State but seventy-three children of Massachusetts-born parents at work and illiterate. So much the system has accomplished.

The character of the teaching force of the State may also legitimately be attributed to the system. Three elements determine the professional character and standing of the teachers, their training, their pay and other revenues. Forty per cent. of the teachers have attended State normal schools. The salaries of the teachers in city and country, men and women, average sixty dollars a month. Resulting partly from these two facts, and partly from the wise legislation fixing the relation of teachers and school officers, the tenure of office is so permanent that of the whole body of teachers only fifteen per cent. is annually changed. In these particulars Massachusetts seems to be in the van.

The reading habits of the people are a direct result of the system of education. Sixty years ago, in a little town having less than 900 inhabitants, there were nearly 6,000 books in public and private libraries. Forty-seven different magazines and newspapers were regularly taken, for which four hundred dollars were annually paid. To-day the State, according to good authority, has more than half of all the free public libraries in the Union. They are open to ninety-four per cent. of her population, and their patronage is as widespread as their constituency.

After all this has been said, there is another word. The success of Massachusetts in educating her people has not been achieved chiefly by compulsion. The motto of the friends of progress has always been,—"Light

before Law," so that the practice of the people has far outrun the legal requirements. Compulsory education laws can only emanate from people already educated. The laws only serve to bring up a lagging rear.

The progress which the State is making now is not in the line of compulsion. In the quality of school buildings, in the consolidation and organization of country schools, in course of study, in methods of instruction in all grades, in supply of illustrative material, in closeness, intelligence and efficiency of supervision, in evening schools, in high-school attendance, in industrial drawing, in the diffusion of pedagogical knowledge and the development of a professional spirit among teachers, in proper acceptance of progressive measures, in close and cordial relation between local and State officials, more advance has been made in the last ten years than in any previous ten. The motive to all this advance is not law,—it is the good-will of the people.

Not forgetting the past, the State looks toward the future with unfaltering purpose and unflagging effort. Nor is she isolated in her thought or feeling. If she has been so in the past it has been the inevitable isolation of the pioneer, and not the selfish isolation of the recluse. She watches with intense interest every struggle of the friends of progress, and keenly regrets every set-back. Her sympathies are national. She believes that if one member suffer all the members suffer with it. And toward her sister States she bears herself always in the spirit of Chaucer's clerk of Oxenford, "And gladly wolde he lerne and gladly teche."

DISCUSSION.

[Reported by Superintendent Greenwood, Kansas City, Mo.]

Mr. Edwin P. Seaver, Boston, Mass.: Mr. President, when I told you I would discuss the topic of this paper, I promised to give you a few carefully ascertained facts going to show how well or how ill the compulsory school attendance laws are enforced in that part of the commonwealth of Massachusetts known as Boston. Such a statement of facts may have a use in disclosing some of the difficulties in the way of procuring an absolutely complete obedience to the law, and in indicating the amount and kind of effort necessary to bring about such obedience.

The facts I have to state are the results of thorough and repeated investigation, begun in the year 1885, and repeated every year, save one, since that date. In each individual case of reported absence from school, inquiry has been made to learn the reasons for non-attendance. To the clear cases of disobedience to the law have been added all doubtful cases. The uniform presumption has been in favor of disobedience; and unless

this presumption could be overcome by positive evidence, the case has been counted as one of disobedience. No excuses save those recognized by the statute itself have been allowed,—not even that of extreme poverty.

The general result, stated in round numbers, and as averaging the particular results of several years, is this, that of 50,000 children in Boston, to whom the compulsory laws apply, the number found inexcusably absent from school during any one year is between 500 or 600, or a trifle over one per cent. Also, it is true that more than half of this unexcused absence occurs among children already fourteen years old; that is, among children just approaching the time of exemption from the compulsory law. Again, more than one-half of the remaining unexcused absences occurs among children already thirteen years old. Thus it appears that school attendance is well-nigh perfect among the younger children ; that is, among those from eight to twelve years of age, both ages included.

During these five years of school life, the children are practically all in school if not physically disabled,—scarcely over one hundred absentees in a population of over 400,000. It may be added, too, and it is very important to remember, that the 500 or 600 children reported absent this year are not the same children who were so reported last year, nor again are they the same ones that will be reported next year. A comparison of the list of names in the successive years settles this point.. Scarcely one name in a hundred appears on the list for two successive years. Children of school age growing up in ignorance are very rarely found in Boston ; for their absence from school almost never continues over a year at a time.

It is further true, and noteworthy, that by far the larger part of the ascertained illegal non-attendance is found among the foreign and un-Americanized population. This element in our society is not reached by that strong public sentiment which characterizes the purely American and the thoroughly Americanized populations.

That you may place full confidence in the statements thus far made, let me go into details somewhat minutely to describe my method of investigation. Every year, in the month of May, a school-census is taken. This is a thorough house-to-house canvass of the whole city by persons of skill in such work. The names, ages, and residences of all children between five and fifteen years of age are written down by the census-takers in books. Against each name is recorded the fact of attendance at a public school, or of attendance at a private or parochial school, or of non-attendance at any school, as the case may be, during the year from May 1st to May 1st. Also are recorded any reasons that may be learned for non-attendance at school. Thus, in the year 1886, I learned from these books that there were in Boston 70,090 children from five to fifteen years of age. Note, if you please, that the lower age limit is taken inclusively, the upper exclusively. Of these children 54,626 attended public schools; 7,912

attended private or parochial schools; and 7,752 did not attend any school *that year*. This last number has been a somewhat troublesome item in my reports. Shallow writers, aiming at sensation, have quoted the figures as bearing official evidence that some seven or eight thousand children in Boston were growing up in ignorance. Follow me, if you will, in a close analysis of the facts, and you shall see the seven or eight thousand dwindle to a very much less alarming size. In the first place, let me set aside all the children five and six years of age. We may or may not think these children ought to be in school; their parents certainly consider them too young; but we may for present purposes set them aside, for their absence from school involves no disobedience to the law. Most of them will be in school by the time they are seven years old. Of these five- and six-year-olds thus set aside there are 5,625.

Next may be set aside the seven-year-olds, whose cases, though carefully investigated by me for other purposes, have no bearing on our present inquiry. Their absence from school involves no disobedience to the law. There are only 443 of these cases, showing that nearly all the seven-year-olds are in school any way. These two deductions, aggregating over six thousand, having been made, there remain to be investigated 1,684 cases of children whose absence from school, *if inexcusable, under the terms of the law*, was illegal.

The next step is to learn the reasons in each individual case for the reported non-attendance; sometimes, indeed, it is to inquire whether the report itself be not a mistake. The census-books contain remarks from which much may be learned. But I have it in my power to verify or correct these remarks by a wholly independent inquiry. The truant officers, of whom Boston employs a force of sixteen, offer me all needed help for this purpose. The names, ages, and residences of all the children I wish to inquire about are copied out of the census-books and given to the truant officers, toward the end of the month following the one in which the census was taken, with my request that they ascertain by personal inquiry and report on the cards in writing the reasons, if any, for non-attendance. The report of the truant officer thus made, being compared with the remarks recorded in the census-books, which, by the bye, the truant officer does not see, enables me to decide with the confidence imparted by testimony from independent sources whether or not the reported absence from school was excusable under the law.

This thorough double investigation is applied to the children eight to thirteen years old, both ages inclusive; the cases of the fourteen-year-olds being treated separately, as shall be described presently. Take note here of the very significant fact that of the 1,684 cases now to be investigated,—and which contain all the disobedience to the law that we are going to find,—more than one-half are cases of children already fourteen years of age.

Thus:

Children reported non-attendant:	
Aged eight to thirteen	775
Aged fourteen	909
Total	1,684

We will begin with the 775 non-attendants from eight to thirteen years old. The concurrent testimony of census-taker and truant officer shows that 260 of these are invalids, physically unfit to be in school all the year, and in many sad cases unlikely ever to be in school again. There were also thirty-eight children under care and instruction at home by private tutors or governesses; sixty-six had lately moved into the city, and had not attended school in the towns they came from, many of them being foreigners; and forty-four were only transiently residents within the city. So far no disobedience to the law. But the same concurrent testimony proves 117 children were "at work" or "helping at home," in non-compliance with the law. Some of these cases were well known, but had been winked at for good reasons, to be stated further on.

We have left now a class of cases in which the testimony is either conflicting or imperfect, or both. In the cases where the testimony is conflicting there must appear clear reason for rejecting one part or the other, otherwise the conclusion is counted as doubtful and construed unfavorably. Where the point at issue is the fact of attendance the school records settle the question; where the dispute is about the age, there are church or municipal records that can be appealed to. Among these debatable cases I find eighty-seven in which I cannot adopt a positively favorable conclusion; in the rest the presumption of disobedience is clearly overcome. Adding these eighty-seven doubtful cases to the 117 certain cases, we have 204 as the whole number of cases of disobedience discovered among the 775 cases with which we began.

Now as to the 909 cases of fourteen-year-olds. The information contained in the census-books is clear enough in most cases. The assistance of truant officers is not needed and is not used. The presumption of disobedience is stronger in these cases, inasmuch as the desire both of the parents and of the children to reap the rewards of child-labor grows much stronger as the age of legal exemption from school attendance approaches. But, on the other hand, there are two considerations to explain why the amount of disobedience among the fourteen-year-olds is not very large after all. In the first place, children may be, and often are, exempt from further school attendance as early as the age of thirteen and a half years; for the statute is fulfilled the moment the child has attended school twenty weeks* since reaching his thirteenth birthday. It is quite within the

* By a recent change in the law thirty weeks is now required instead of twenty, as at the time of the investigation.

limits of possibility, therefore, that fully a half of the children reported fourteen years old and "out of school" should be already exempt from the law. In the second place, there is a strong motive growing out of the law relating to the employment of children which operates to induce children to put in the last twenty weeks' attendance required of them by the law, as soon as they possibly can after reaching their thirteenth birthday. By so doing they get an unlimited employment certificate; but by postponing their last period of attendance they can receive only a limited certificate, one obliging them to return to school again before they shall be old enough to be exempt from the law altogether. Without taking you through all the details, I may say that the results of investigation for several successive years have shown that one-third is a fairly high proportion to allow for the amount of disobedience to the law in the fourteen-year-old class. This would give 303 cases in the year now under consideration, which number added to the 204 cases among the younger children already found makes 507 cases in all. This result is rather better than that of the year before, and not so good as the result two years before. Now, adding about a hundred, to answer all possible cavil and doubt, and not because I can see any other reason for doing so, we have the result already given, 500 or 600 cases of illegal staying out of school during one school year, among 50,000 children whom the law touches.

May I not confidently say that the Massachusetts compulsory law compels? The law which thus compels has two arms. With one arm it reaches the parent and enforces the parental obligation. This arm is supported by an almost universal public sentiment. Prosecutions under it are of very rare occurrence, for the reason that the very poor, who alone violate it, have no money with which to pay fines; and sending them to jail for non-payment would be harsh treatment. The other arm of the law lays hold on employers of child-labor. Employment of children under thirteen years of age is prohibited absolutely; and employment of those from thirteen to sixteen is forbidden under a serious penalty, unless the employer keep on file and open to inspection of State officers a certificate reciting two important facts: (1) the age of the child, (2) the fact that the law of compulsory attendance has been fully satisfied. This certificate can be obtained only from the superintendent of schools, who thus has the power to prevent the employment of children who have not yet fulfilled the law. This arm of the law is very effectual. The employers are very vigilantly watched, and they are correspondingly careful not to incur the penalty. Thus children who have not attended school as required by law, find themselves shut out of employment altogether, and discover that the best thing for them to do is to go back to school.

The present employment law, which was enacted in 1888, is more stringent than the old law and provided with better means and agents for enforcement. The result has already appeared in a greatly improved school

attendance of children thirteen and fourteen years of age. One improvement ought to be made in the law. The age of permitted employment ought not to begin before that of compulsory school attendance has ended. This change would save much trouble.

In drawing these remarks to a close, I wish to express one thought which my observation and experience have impressed on my mind with great force. It is this, that a perfectly rigid and complete enforcement of our school-attendance laws cannot be had without an amount of suffering which no humane agent of the law would willingly be responsible for.

That you may the better understand the character of the cases I now allude to, permit me to quote from my report to the School Committee of Boston for the year 1886, where these cases are presented in the concrete, as it were, being more vividly described than they could be by any general phrases now at my command.

"The grim struggle for existence involves every child in the family old enough to earn a dime. No officers are so unfeeling as to increase the difficulties of such a struggle; and therefore it is only reasonable to expect that, in the absence of other relief, the school-attendance law will go unexecuted. If it be said that the public charities should give the help needed in such cases, the answer is, first, that they do not appear to have done so hitherto; and, secondly, even if they were now ready to do so, it would still be a serious question whether pauperization should be promoted for the sake of a little more schooling. The very point of the struggle in these cases is to live without the help of public charity.

"But these questions open too wide a field of discussion for me to enter upon now. My aim is to make it clear that a perfectly rigorous execution of the present law cannot reasonably be expected. Among the cases actually investigated, I find about fifty cases of great hardship; and among those not investigated, but still within the limit of age, I should have found about as many more. Therefore, he who would insist on a perfectly rigorous execution of the law in this city must, if he would be reasonable, first provide some way of relieving about a hundred cases of hardship. What these cases are may be gathered from the following selections:

"No. 1191. Boy, eight years old. 'The father of this boy has been out of work most of the winter and could not furnish all of his children with clothes and shoes. Two of the older ones are in school.'

"No. 1206. Girl, eight years old. 'This family consists of three persons, mother and two daughters, one eight, the other four years old. The mother washes for a living and is obliged to keep the oldest girl from school to take care of the other. Both will enter school in September.'

"No. 483. Girl, eight years old. 'This girl has been taking care of three younger children while the mother goes out to work. There are three older children in school. She will go in September.'

"No. 837. Boy, nine years old. 'Father blind. Goes with him peddling.'

"No. 524. Boy, ten years old. 'This boy is a member of the Brimmer School. The mother says her children had to stay away from school. No clothing. No one working but the oldest boy, who says he is fourteen years and six months old.'

"No. 378. Girl, ten years old. 'Came from Italy a year ago. Mother has been sick in bed until a month ago, and the girl has taken care of the house and family. Can talk but little English. But mother is better now, and girl will attend school in September.'

"No. 327. Girl, ten or twelve years old. 'Has been kept at home to take care of small child. Mother keeps a stand on Atlantic Avenue. The father sick for three years, and does not go out much. Three children in the family.'

"Nos. 197 and 198. Boy eight and girl ten years old. 'The mother died a few months ago, and the father cannot get work to get the children clothes suitable to attend school.'

"No. 181. Boy, eleven years old. 'This boy's parents are both dead. He lives with his grandmother. He has not had clothes suitable to attend school.'

"No. 690. Girl, twelve years old. 'This girl's mother is dead. She has been kept at home to take care of the family of small children. They are very poor.'

"No. 375. Boy, twelve (?) years old. 'Italians. None of them can talk English. A smart little interpreter says the father and mother both say the boy is fifteen years old. He cannot talk English. He plays a fiddle about the streets, and supports the family of four persons—one a sick brother.'

"No. 285. Girl, twelve years old. 'The father and mother do nothing for her support. Obliged to support herself; works for her board. Mother at Deer Island. If father has more than he spends for rum, gives her a dollar.'

"No. 320. Girl, twelve years old. 'Lives with her aunt, who says she cannot afford to send her to school. Attends the evening school in the winter. Has a father and mother, but they do not support her. They drink badly.'

"No. 434. Girl, twelve years old. 'This family came from Ireland about two years ago. There are nine children, five of them younger than this one. When they arrived in New York the mother became insane, and afterward died. They are very poor. This girl has to do the work in the house and take care of the children. The three older ones are in school. Can read and write well.'

"No. 187. Boy, thirteen years old. 'This boy's father is dead. There are five children in the family, so this boy is obliged to work to help support the family.'

"No. 688. Boy, thirteen years old. 'This boy's father is dead. Family very poor. He is a telegraph boy, and has been during the past year.'

"No. 684. Girl, thirteen years old. 'This girl's mother is sick, and has to keep Maggie at home to take care of her, as she is too poor to hire.'

"No. 220. Girl, thirteen years old. 'This girl's mother is blind, and she is obliged to stay at home to do the work and care for her mother.'

"No. 170. Girl, thirteen years old. 'This girl's father is dead, and her mother is in an insane hospital. The girl is obliged to work for her own support.'

"No. 440. Girl, thirteen years old. 'Father and mother dead. Living with an uncle, whose wife is dead. She keeps house and takes care of an invalid child. Will go to school in September. Was thirteen years old last October, and has been out of school two years.'"

From such specimen bricks you may judge of the whole house.

MR. HANCOCK, of Ohio, inquired whether there were not provisions in the law for the relief of such cases.

MR. SEAVER: No, there is no law whatever under which public charitable relief can be given in such cases. The families in question occupy a position just above the level of actual pauperism. The very point and stress of their struggles is to avoid the necessity of accepting public charity —of becoming paupers. The feeling is an honorable one, and deserves all respect. Let private charity enter into this field and occupy it, but let public charity keep away as long as possible.

MR. I. N. MITCHELL, Fond du Lac, Wis.: Mr. President, I think the vital point of this paper and the discussion is that the State of Massachusetts demands and secures the recognition of its right to supervise the work of the parochial school. These gentlemen show clearly that the course of study in the parochial school must be approved by the authorities of the public school. This is the vital question that was raised and not answered in the discussion of the first paper of the session.

MR. A. P. MARBLE, Worcester, Mass.: The statute of Massachusetts requires that all pupils up to the age of fourteen shall attend a public day-school at least thirty weeks in each year, or a private school approved by the school committee of the town or city for the same time. Such school attendance is not insisted on, however, in case of illness, or if it can be shown that the pupil has received an education equivalent to what is received in the schools. Employers of children under sixteen years of age are required to keep on file a certificate of the age and school attendance of each child employed; and absence of such a certificate in case of any child found employed is *prima facie* evidence of a violation of the law, and subjects the employer to a fine. In giving the certificates of school attendance the school committee must be aware of the character of any private school, and know whether the register of attendance is properly kept, and

whether the instruction conforms to law; that is, whether a knowledge of the English language is acquired. The agent, or whoever acts for the committee, may ascertain as to the amount and the kind of instruction by an examination of each pupil who applies for a certificate. He can learn about the register of attendance only by inquiring of the teacher of the private school; and in case of pupils who require no certificate for entering a shop, store, or factory, the only means of knowing whether the compulsory law is complied with is an inspection of the private school.

A compulsory school law, then, implies that the State (which is only an organized form of public opinion) may take cognizance of private schools far enough to see that no child is deprived of that small amount of education on which the State insists; that is, ability to read and write in the English language, and a moderate knowledge of arithmetic and geography, for example.

But so much of oversight is not hostility to private schools, nor any infringement of parental control any more than the law requiring parents to clothe and feed their children. On the contrary, such an oversight is a positive help to a private school; since parents would not patronize it if the children could not receive certificates to entitle them to be employed, or if their children did not receive a fair amount of education, such as the law requires.

The public-school authorities, if wise, would not undertake to inspect private schools in any other than a friendly spirit and for the purpose of learning what is indispensable for them to know. They would be received cheerfully, since all schools are presumed to aim at good education; and they would soon be welcome in making friendly criticism. And parents would not long patronize a school which refused to allow the public-school authorities to ascertain what is so important for them to know, where the principle is acted on that all children have a right to a moderate amount of education. On any other principle than that outlined above, a compulsory school law—it would be better to call it a law for securing to each child his birthright of intelligence, since compulsion is a harsh term to American ears—on any other principle, such a law would be a dead-letter; for if the school authorities cannot inquire into the character of any school, then by means of a fictitious school the law might be successfully and easily evaded. Examination of each pupil applying for a certificate is only an indirect and practically very cumbersome way of inspecting the school which he has attended. This is not a merely theoretical question. In my city a private or parochial school for French children has invited with great cordiality an inspection for the purpose indicated above; and in a few instances certificates have been refused to children who had not acquired a knowledge of the English language.

HON. B. G. NORTHROP, Clinton, Conn.: Mr. Martin is correct in saying

that Massachusetts was the first State in the world that enacted the principle of compulsory education; but her younger sister, Connecticut, though eight years later in fact, was earlier in her own history in adopting the same measure. Two hundred and thirty-nine years ago, in Connecticut, the selectmen in every town were required to see that so much "*barbarism* was not permitted in any family, as that their children and apprentices should not be able to read the English tongue, upon penalty of twenty shillings for each neglect therein." This law was strictly executed, and was so heartily approved, that attendance lost its involuntary character. To bring up a child, or ward, or apprentice in ignorance was shameful and *barbarous* in the eyes of the fathers of Connecticut. This is still the sentiment of their genuine descendants. High appreciation of education is one of the most precious traditions of our State. In any State where there are no such traditions, and no such general and hearty appreciation of education, obligatory laws would be premature, as they would be where the State School Superintendent is understood to have no faith in them. Though there be no open opposition, if that officer simply stands aloof, as has sometimes happened, if he maintains a dignified reserve, the law will not be likely to execute itself. Firmness, united with conciliation and earnest work, are the conditions of success. Instead of falling back upon the law to do the whole work, argument, persuasion, and conciliation have been the main reliance. The right to enforce is itself an argument to persuade an authoritative appeal to good sense and parental pride. Such a law, when used as a *dernier resort*, in cases otherwise incorrigible, becomes a moral force, an effective advocate of education to the very class who need it most. Our law applies not only to parents and manufacturers, but to all "*employers in any labor whatsoever.*" When I attempted to introduce a more stringent provision into the Connecticut law—that given in the last clause—the objection was made: "The laboring classes won't stand it." But it is a significant fact that the labor unions in this country and in Europe approve obligatory education. Both political parties favor it. So far as I know, no suggestion for the repeal of our rigid law has been made in the Legislature, nor in any caucus or public meeting in the State.

I can confirm what Mr. Martin has so well said in regard to the free public libraries of Massachusetts. Nothing reflects more credit upon that State during the last forty years than the history of her free libraries. This marvellous multiplication of free public libraries, which is so striking a feature of our day, originated with Dr. Francis Wayland while he was President of Brown University, but so unconsciously to himself as to show that he builded better than he knew. In 1847 he tendered $500 to the little town of Massachusetts named from him, on condition that its citizens should provide an equal amount for a free public library. More than the required sum was promptly raised. The first anniversary of this library was celebrated with great enthusiasm, when a memorable address was given

by Dr. Wayland, which was generally reported in the papers of Boston and elsewhere. He then expressed the hope that all the neighboring towns would follow the example of Wayland. That wish was soon realized. Though the sum was small, as were also his means, the eminence of the donor gave special significance to his gift and to his speech on the value of libraries, and led to the enactment of a free public library law, legalizing the support of libraries by taxation. That act, passed forty years ago, which was the first of the kind in the world, has stood the crucial test of experience. While for nearly eleven years agent of the State Board of Education of Massachusetts, visiting every town and advocating the organization of libraries, I seldom encountered any objections to this law. Massachusetts may well glory in the fact that it has 246 free libraries, containing in the aggregate about 2,500,000 volumes. Munificent gifts have been made to them in money—not including books—exceeding $5,500,000, and now fifty-three patronymic libraries worthily bear the names of their founders or chief benefactors. There is no other equal area on this globe so well supplied with free libraries. Only 103 towns are without such a library, but these are small towns that have declined in population during the last five years. The State is now encouraging these poor towns, by giving books to the value of $100 to any one complying with the simple provisions of the law.

This library movement is happily spreading over the country, and many are founding libraries in their own towns. But Andrew Carnegie is leading all others in such benefactions, giving $40,000 to his native town, Dunfermline, Scotland (besides erecting commodious swimming baths for the free use of the people); $250,000 to the neighboring city, Edinburgh; $250,000 to Allegheny City, Pa.; $50,000 to Bellevue Hospital; $1,000,000 to Pittsburgh, Pa., besides establishing free libraries at Braddock, Pa., and at other places, for the benefit of his employees.

QUALIFICATION AND SUPPLY OF TEACHERS FOR CITY PUBLIC SCHOOLS.

BY WM. E. ANDERSON, SUPERINTENDENT OF SCHOOLS, MILWAUKEE, WIS.

The aim of this discourse forbids extended mention of those obstacles to the elevation of the standard of education in city schools, which, in the form of leading prejudices, beset every school board and superintendent. Every one who is familiar with the management of city school systems is aware of the serious hindrance to progress which these prejudices set up. They cannot be argued out of existence. It is better to treat them as facts and deal with them accordingly. One of these which proves an alluring topic

for debate is the predominance of female teachers, a fact which seems to be regretted in nearly all respectable school reports. The superiority of men over women as teachers is by a large number regarded as so self-evident that the decline in the ratio of male teachers is mentioned almost invariably with regret. The disproportion, which seems to increase from year to year, is, however, a fact which defies legislative remedy or control,—a fact which has its cause in certain social changes which can never be modified or withstood by the puny attempts of schoolmasters and school boards.

Another prejudice, existing especially in large cities, which will receive some attention in the course of my remarks, is the narrow objection to what are termed "outsiders," and the misleading and selfish sophistry which, in favor of so-called "home talent," discriminates against persons who have been educated abroad. These questions of preference, not of fitness, are quite subsidiary to the great problem of reinforcing the teaching corps of a city with an ample supply of vigorous and well-trained or experienced instructors. Paramount to all other facts connected with the appointment of teachers is that of *fitness;* and fitness is not analyzable into any other elements than *intellectual* attainments, *refined* and *cultivated character,* and *professional capacity and skill,* either trained or developed by experience. No other modifying or conditioning circumstances, no question of sex, nationality, or residence, politics, or religion should be allowed to offset the elements which constitute superior fitness.

It will be necessary to pass by another very inviting phase of this question; namely, the vesting of the appointing of teachers in offices, in central committees, or in the hands of local commissioners. Reform and improvement in city schools does not depend so much upon the facts as to what persons exercise the right of nomination as upon the standard of eligibility which should govern and restrict the action of appointing officers. The appointment of teachers in the city schools is governed by the previous fact of qualification or certification. If the appointing power is distributed among lay officers, however high may be their purposes, there is urgent necessity of rigorous rules for certification. The more widely the power of appointment is distributed, the greater the weight and influence exercised in behalf of the would-be teacher and regardless of the interests of the school. We are all acquainted with the commissioner who would be good enough to give all persons certificates whose fathers are tax-payers, who looks upon the maintenance of schools first of all with reference to the support of teachers, and who sees no farther into the problem of licensing and selecting instructors than what appears to be a charitable mission of giving to as many deserving young women as possible a chance to earn a decent living. The good man who feels that the place should be given to the applicant who comes first, to the girl who has a mother to support, to the graduate of his own school, the daughter of a local politician, or a member of the same church with himself, will always flourish in city school

boards. He is frequently a good man for all other purposes but hiring teachers, and there is no reason for disqualifying him for exercising that function,—when his generous predilections may be rendered harmless by a little wise legislation.

Another phase of the question, which you will please allow me to mention, in order to clearly state the main purpose of this paper, is the position of the superintendent of schools with regard to the nomination of teachers. While I do not concur in what seems to me to be an illogical theory of very respectable support, a theory which would assign to the superintendent the business of certificating and licensing, and exclude him from the duty of appointment or assignment, it is not permissible to show the inconsistency of that policy. But I do not wish to discuss the question as to what person or what official may, with best interest to the schools, be vested with the power of appointment. The problem which seems to me most deserving our attention, in the form of a simple proposition, may be stated thus: What should be done to secure for a system of city schools an ample supply of well-qualified teachers? The conditions upon which this problem is to be solved run as follows:

The teaching corps of a city needs continual reinforcement to supply the places of retiring teachers, and to occupy new positions created by the growth of the system. In large cities, those of one hundred thousand population or upward, the problem of recruiting the ranks of the teaching corps is of supreme importance, and increases in difficulty as the demand for teachers increases. Unfortunately, the administrative and supervisory departments of the city school systems are not proportionally strengthened with the city's growth, and hence the need of systemization and wise rules to regulate the licensing and appointing of teachers. Notwithstanding the permanent tenure which prevails, especially in large cities, as compared with the average tenure prevailing in less populous communities, there is a continual change, due to voluntary retirement or to influences beyond official control, which makes necessary a continual reinforcement of the corps. A minority,—sometimes a small minority,—of the whole number of annual changes occur at the end of the school year, or at such time as enables the board to supply the vacancies from the many teachers desiring a change and free to make new annual contracts. A majority of the changes occur from time to time, during the year, at this place or that, now unexpectedly, and again after due notice, but all requiring the substitution of competent teachers. By the time the school is well opened and organized in September, there are two classes of persons which it is well to consider. The first class includes teachers of presumable competency and ability, engaged in the schools, but who will vacate their places before the end of the year. The second class includes an equal number of would-be teachers, novitiates, and disappointed applicants, ready, upon notice, to supply vacancies. Teachers' "supply agencies"

find constant business in the fact that among a given number of teachers there is a fairly constant rate of retirement with a consequent need of an equal rate of substitution. The fact is of interest to us, inasmuch as it suggests a much more important fact; namely, that, through the occasional retirement of teachers from the corps, the character and general ability of the teaching force, and, therefore, the efficiency of the instruction, are determined, and may, by wise measures, be advanced, or, by narrowness and indifference, be allowed to decline irreparably.

From estimates made in the Milwaukee schools in the years 1887 and 1888, when this subject was carefully examined, I found the rate of change in the *personnel* of the teaching corps to be from ten to twelve per cent. The present corps of more than 500 teachers at this rate needs an annual reinforcement of fifty teachers to supply vacancies, and twenty-five to fill new places caused by growth of the system,—a total of seventy-five new teachers annually. In Chicago this rate of change would approximate an annual addition to the teaching corps of 240 teachers. Perhaps the more rapid rate of expansion which has characterized the growth of Chicago would require even more than this number of annual additions to the list of teachers. In Philadelphia, I think, there are employed 2,400 or more teachers. I understand that the number now exceeds 2,600. The penalty for matrimony which some boards impose, and the same average of retirements through unavoidable causes which holds in Milwaukee, would require at least 250 recruits annually to supply vacancies. It is apparent, in view of these facts, that a weak and defective policy under which so many new teachers are employed must impair the work of the schools, and, in the course of time, operate as an insurmountable obstacle to progress and improvement. On the other hand, a thorough, efficient, and practical system of supplying all vacancies with the best talent procurable, and this without regard to any consideration ulterior to the prime object of good teaching, must raise and improve the standard of public education.

If Superintendent Bradley and the School Board of Minneapolis, or the committee on appointments, were obliged to engage an entirely new corps of teachers annually, they would do only what must be done by such a board as that of Chicago or Philadelphia. Of course, the sources of supply in the latter-named cities must be comparatively large, but the business of selecting appointees devolves upon a board and officials of limited numbers, and it is not invidious to doubt whether the capacity of the city board increases with the increasing number of appointments to be made and the importance of the work of selection. If this important business is relegated to local boards or committees or commissioners, the sources of supply, though on the whole augmented, are still lower in qualification, and the danger of inferior appointments is greatly increased. The larger the city, therefore, the greater the liability from this cause to admit to the teaching corps inferior teachers, and the greater the necessity, as before

remarked, of laws and a wisely devised system of applying standards of qualification and of supplying vacancies.

I am well aware that it is not conformable to general reports to cast doubt upon the ability of city boards and superintendents to maintain and advance the excellence of instruction along with the growth of the school system. Large cities are not only a law, each to itself, but the merit or the demerit of their institutions is frequently established upon their own reports. The glittering compliments to the high culture, unselfish devotion, professional skill, progressive spirit, and general excellence characterizing the teaching work, which with many of us in pretty rhetoric adorn our reports, which seem very relishable to the palate of the public, have won reputations for city schools even in the face of some very open and conspicuous facts. A few "crack" classes form no criterion of excellence and high standing of a city system. That can be estimated only by the general high average of the regular work performed in the large majority of the schools and by a majority of the teachers.

Having suggested the comparative disabilities and disadvantages under which city boards labor in recruiting the rank and file of teachers, by reason of the large number of continually occurring vacancies, another source of weakness in city systems requires attention,—a source somewhat obscured by the prestige of city systems, and too often ignored by school boards or those intrusted with the duty of forming rules for the qualification and appointment of teachers.

The higher salaries paid in large cities are supposed to attract talent, and, on the whole, to give the city schools an advantage over those of small towns, which good teachers leave, invited by better compensation and the higher satisfaction of city life. Closely connected, however, with the advantage which higher salaries are supposed to secure, are corresponding drawbacks. Liberal salaries are quite as attractive to the half-educated novice and the incompetent of varied trials and many failures, as they are to the well-trained and successful. Where the inducements are such as to encourage and reward the most capable, there should be strong safeguards against the presumptions of the unworthy. Boards of large cities have to contend with obstacles not felt in smaller cities and towns. They have to meet stubborn and narrow prejudices, sometimes most strongly expressed and intrenched among their own membership; they have to maintain by wise rules a barrier against more persistent and more numerous applicants; and, as I shall show further on, the sources whence they must draw teachers are not so fruitful of that kind of talent and ability which makes good teachers as is generally supposed.

In the report of the Commissioner of Education for 1887 and 1888 may be found some information that well deserves the attention of those interested in the improvement of city schools, and who realize how much depends upon the qualification of teachers.

A recent proposition made in the Milwaukee Board to certificate high-school graduates brought about a comparison between the number of pupils following high-school courses in smaller cities of the State and those of Milwaukee. The comparison showed that in proportion to population and in proportion to the whole number of public school teachers employed in the small cities, there was an average of two or three times as many pupils enrolled in high schools. Making such comparison between the high-school enrollment of Philadelphia and that in other cities in Pennsylvania, the same conditions may be observed. According to this report, the forty-two cities of six thousand population and upwards had an aggregate attendance in high schools of 5,391,—two and a half times the high-school attendance of Philadelphia. The total population of these forty-two cities is given as about a thousand more than that of the great Quaker City. After making allowance for inferior grading of high schools in some of the smaller cities, there is still ground for presumption that secondary education in larger cities does not keep pace, or correspond, with their growth; and the inference seems plain that the class of persons of education fit to recruit the ranks of public school teachers is by no means so large and promising as is generally supposed. My investigation of the subject leads me to the conclusion that the superiority of public school systems of large cities over small cities and towns is not in the development of the high school or in secondary education, but in the elementary school, and in the advantages due to close grading and organization. The apparently limited extent of secondary and professional education adds weight to the conclusion that as cities increase in population, the reinforcement and recruiting of the teaching force with well-qualified instructors becomes more and more difficult. It also contains a warning against the narrow policy of restricting appointments to residents, and of the passing of rules to discriminate against applicants on other grounds than those of ability and character.

Three classes constitute the supply of teachers for city schools. They are: First,—Teachers trained by the city in the training class or normal schools, which in turn are fed by high schools and academies. Second,—Teachers trained in distant classes or normal schools, and either by examination or acceptance of diploma licensed and appointed. The majority have experience before applying for places in the city. Though professionally trained, they, as a class, have qualities distinct from the city trained teachers and are not infrequently called "country teachers," or "outsiders." Third,—Teachers without professional training who, having won certificates upon examination abroad or in the city, enter the rolls and abide their time to secure appointments. With these are included the unfinished productions of high schools and academies, and many young persons who, spurred by necessity, seek a shorter cut to the earning of a living than the way through the normal school. In some of the Western cities the list of the so-called "substitutes" is made up from this class. The

first two sources mentioned include persons of professional training; the third, by no means inferior in number, expect to make teachers of themselves after engagement. Among them may be a few having such natural gifts as to deserve the appellation "born teachers," a term which is converted into that sophism so often resorted to in proof of the inadequacy of normal training, namely,—"teachers *are born, not made.*" This class, however, includes a much larger number, who, for the welfare of the children whom they are entrusted to teach, might better not have been born at all. The principal point to be noticed in regard to this third class is, that they make teachers of themselves at the sacrifice of their pupils' interests, upon whom they must practice and experiment; and, further, that cities must train teachers, and, if enough are not home-trained, get more from abroad, or allow a procession of novices to invade the schools and in their own way make teachers of themselves. Teachers are either made by systematic and scientific training wherein practice and principles are harmonized, or they gain skill in a desultory, empirical way and by mechanical imitation. Experience they may be said to get also, but there are two kinds of that, general and indefinite as the term is when applied to the work of teaching. It seems hardly necessary to urge to this audience the great desirability of a professional standard for admission to the ranks of city teachers,—I use the term professional in its broadest sense, to include those who are skilled in the profession by successful experience. The practical obstacles to enforcing professional training or experience as a prerequisite to a license or appointment are not so serious as to deter us from attempting the establishment of such a standard. I believe that it might be accomplished more easily than is generally supposed. Like the long deferred resumption of specie and the end of financial philosophy in the advice, "the way to resume is to resume," there is a way for city boards to lead and succeed in recognizing no one as worthy to teach who has not made special preparation under conditions favorable to combined practice and study of the art of teaching. In the absence of any professional training, experience, together with proof of high general culture, should be acceptable. The establishment of such a standard would at once dispose of that army of well-intending novices who are constantly in waiting to fill the vacant places as they appear in public schools. It would exclude a considerable number of those immature persons who, more ambitious than successful in their efforts before village boards, find easier access into city school-rooms by the aid of their city friends. It would, of course, exclude that large number of young people in the city who are unwilling to give to the preparation of teaching the time and labor which modern methods require. Rules faithfully enforced to accomplish this end would, in my opinion, promote the efficiency of city schools more than any other single measure which might be adopted.

Allow me to indicate one helpful step toward the attainment of such a

standard of eligibility for employment. Some three or four years ago an inquiry into the frequency of teachers' absences, and the average number of substitutes employed to fill such absences, suggested a change, whereby a larger number of well-qualified teachers than those assigned to places should be kept at the command of the board. In Milwaukee it was found that of a corps of 400 teachers employed at that time, there was an average absence of twelve to fifteen teachers a day, the absences some days exceeding twenty. This includes all vacant places, permanent and temporary. It frequently happens that two or three vacancies exist for which there is no appointee at hand. It was customary, as in other places, to occupy these by so-called substitute teachers having no certificates, or by those having the certificate, but no experience. A rule was adopted empowering a committee and the superintendent to appoint a number of supernumerary teachers to be called the reserve corps. These teachers were the best that could be obtained during the summer vacation. Their appointment was regular, and their salary the same as that of assistant teachers, no deduction being made when their services were not required, providing they reported for service at the office. Members of the reserve corps have their predilections and aptitudes. These, known to the superintendent, are regarded when temporary assignments are made. A vacancy in a seventh or an eighth grade is supplied by a teacher who is supposed to have the capacity for teaching higher grades. A vacancy in the primary grade is supplied by a teacher who is supposed to be adapted to primary work. In the meantime the members of the reserve corps, being selected upon grounds of general efficiency, experience, and training, are eligible for appointment. Their service in temporary classes commends them for appointment, and their detail to occupy recently created vacancies is a kind of preparation for appointment. If the principal is satisfied, a resolution of transfer from the reserve corps to the corps of the school is all that is required. In this way we have been able to satisfy the prerogative of local commissioners who select their own teachers, and with the improvement of the plan hope to introduce a larger number of capable teachers to fill vacancies. As the reserve corps is depleted, it is recruited by the committee and the superintendent, whose business it is to keep a record of applicants and to hold frequent meetings for interviewing applicants for admission to the reserve corps. The corps was first organized under rules which prohibited the employment of any teachers who had taught in the schools previously. The restriction was, however, removed, and perhaps not for the best interests of the schools. Experience has shown that some teachers were kept drifting about upon the reserve corps for a whole year without finding, in the good opinion of principals and commissioners, a transfer to a permanent place. It is best to discontinue such teachers from the service. Otherwise the reserve corps may become occupied by a class of professional substitutes, and become an invalid corps instead of a reserve to supply

capable and vigorous recruits. There are many good features and some unexpected drawbacks connected with the plan; but as a plan to enable the school board to establish a standard of professional training, to provide itself with a sufficient number of teachers duly qualified to receive appointment when such teachers are obtainable, it is abundantly successful. I know of nothing that effects the same ends, except it be the admirable system followed in the Washington schools. Their system seems to rest in well-based confidence in the superintendency, and in the consent of commissioners to allow the supervising officers a large measure of advisory influence. In boards organized upon a different plan from the Washington board, for instance, the local system, such a scheme would be weakened by commissioners insisting upon their prerogative of making appointments.

In conclusion, I must acknowledge that an important field, suggested by the title of this address, has been but slightly scanned. The question as to what should be the nature of the examination, to test scholarship and professional knowledge, is a topic in itself. A minimum amount of exact knowledge should certainly be required; but to cut up the whole field into eight or ten distinct portions, and these portions into as many distinct questions, giving to each subject and to each question an equal value in the total estimate of ability, is a very arbitrary proceeding. The most important feature of such examinations is usually disposed of by eight or ten questions in theory of teaching, the answers to which may be crammed with much less expenditure of time and labor than that given to a preparation in constitution or geography. The professional feature of teachers' examinations should be emphasized. Deficiency or inaccuracy in matters of fact may be overlooked in view of manifest ability in analysis and expression. Finally, I would say that the aim of this paper is to enforce and emphasize the importance of professional training, or its equivalent, successful and broad experience. The preventive of narrowness and mechanical imitation, remarked by competent visitors as characteristic of city schools, is a broad, thorough system of finding and bringing in qualified teachers. The intellectual progress of a great city is not developed exclusively from its own interior creation; like its commercial strength, it derives stimulus and nourishment from without; and the farther are drawn the elements of its life, the more generously it appropriates and absorbs the talent, the skill and industry of the world,—the more certain, rapid, perfect, and beautiful is its growth. It lives for the world about it, and finds its own glory, not in a policy of intellectual exclusiveness, not in discrimination against those attracted to its borders by the rewards and satisfactions which ever invite genius, ambition, and ability, but in opening wide its gates and welcoming from whatever source all that elevates its social, industrial, and intellectual life.

DISCUSSION.

[Reported by Supt. Edwin P. Seaver, of Boston.]

Mr. A. B. Blodgett, Syracuse, N. Y.: Talleyrand once said,—"The art of putting the right men in the right places is first in the science of government." Change two words in the above, and we have the true key to successful school-work.

The art of putting the right teachers in the right places is first in the science of education.

The "qualification" of teachers in this question has reference to the *right* teacher, of course.

Omitting the items of health, broad and accurate scholarship, etc., which must enter into the make-up of every real teacher, I shall touch briefly the following: the teacher's presence, skill, tact, and intelligence. Outside of the items just named, the teacher, though she possess in a marked degree all others of whatsoever name and nature, yet lacking these, is a failure. Prior to and without the aid of normal and training schools, these qualities were attained by teachers, if at all, at the expense of the pupils. Contrary to the old quotation, to my mind the "born teacher" was never born. There are a great many folks in this world, but *very few teachers.*

It is true that some people have come into this world in possession of certain faculties and attributes that readily developed and expanded their possessors into natural teachers; but the really *born* teacher is yet to come. In any event, if any considerable number of the teachers of our day belong to the *born* class, the time for regeneration is at hand.

By the *presence of the teacher* I mean her physique, cast of countenance, and general make-up which is noticeable, as to herself, in the way she walks, in the way she stands, in what she says, in what she does not say. It is observed in her pupils by the close attention given to her every word and motion, and by their unconscious absorbing of the splendid example in all lines which such a teacher presents.

A teacher with a good presence sends the pupils' heads up and their feet down. Her clothes fit her, and a point is gained there.

And then what a fund of reserve power she has! No child has ever seen her ruffled to the depths. No emergency has arisen of which she was not the master.

But I need not say more in this line; she is to be found in all our schools.

Perhaps we do not recognize as we ought the difference between skill and tact in a teacher.

A really skilful teacher may be completely demoralized in presenting a lesson which she has thoroughly prepared, and all from a lack of tact.

To illustrate: As a young teacher I frequently became disheartened by finding in educational periodicals, just as we find them to-day, a very carefully prepared set of questions and answers, showing a certain teacher's method of presenting a special lesson.

First comes a very clear question, followed by a complete, round, full, explicit answer; then another question and a similar answer, and so on, *ad finitum*. Every question good, every answer good, because the teacher has carefully prepared each,—*for print*. Now if any teacher could secure just that state of things in class-work,—but he can't do it,—it would be a skilfully arranged affair; yet without the tact of a live teacher, one sharp question on a side issue, or an unintelligent answer on the part of some pupil, would tend to upset the well-prepared dish.

So the teacher must be alive in all directions, and it requires tact more than all else to arouse the dull, to interest the listless, and to enable the teacher to discard or weave into a recitation just those things that shall be helpful in the give and take of a spirited and profitable recitation hour.

Skill will help the teacher properly to connect her theory with its practical presentation, and tact will enable her successfully to perceive, appreciate, and cope with the circumstances, incidents, and accidents which always accompany the teacher in her arduous tasks.

But a keen intelligence must rule and pervade all things, if the highest eminence is to be attained. Intelligence is sought after and paid for in dogs and horses. It is a most delightful element, yet difficult to find, in a servant girl, particularly in the cook; but we hear very little concerning it, distinctively, as a qualification of teachers.

A few days since, in company with a member of our board of education, I paid a visit to some of the cities and also to one of the normal schools of our State.

It was a source of delight to me to see my companion's keen discrimination and appreciation of the difference in the worth of the teachers whose work we saw. Much of the work was most excellent; some of it no better than could be found at home. Yet I observed that the teaching in which tact, intelligence, and quiet reserve power on the part of the teachers played the greater part, impressed him with much force and drew from him expressions of satisfaction.

I said to him and to myself, I want every member of our board of education to see, as you have seen, the contrast between good teaching and teaching that is not so good.

I say, therefore, that a good presence, skill, tact, and intelligence must be foremost among the requisites of our teachers. And where shall we procure such teachers? Without reference to past practices I answer, teachers of known ability and successful experience from any and all sources. New teachers from normal or training schools under our own

supervision. But a close and careful discrimination and sifting must be pursued along the lines above discussed, as well as others, and especially during the training period, that incompetents or those giving no promise may be weeded out.

I trust I may be pardoned if I refer to our own local work in this line, as I know little of these matters outside of my personal observation and experience.

Our teachers' and training class course covers one year of solid work, and no application for admission to this class is considered, unless the applicant is a graduate of our high school or has completed a course of equal extent elsewhere; and these candidates cannot enter the class till they first pass a thorough examination in subject-matter studies. The necessity of this is manifest. Just here we begin the sifting, as the folfowing will witness. In January last thirty graduates, as above indicated, entered this examination, and *all failed.* Consequently none were permitted to enter the training class. Having once entered the class, at the end of five months they are again tested and promoted, or, in cases that call for it, are advised to discontinue their efforts to become teachers. During the last five months, under the eye of the special critic teacher in their practice work, a still closer observance of their progress is made, and only the best are permitted to enter a final examination in conducting class recitations before a committee, as the following will show. The critic teacher,—a graduate of the Cook County normal, and a good one,—had twenty-two practice teachers in training from September till January last, and presented only nine of the twenty-two for the consideration of the committee. Of these nine six were accepted and three conditioned. In several cases the would-be teachers have failed to receive their certificates, though their literary qualifications were of the best, and solely because they lacked *the presence, the skill, the tact,*—the discriminating intelligence necessary to the successful teacher.

The names of those who meet all requirements are placed upon the list of eligible to appointment, and from this list selections are made when vacancies occur.

I am proud to say at this time that, while I have sometimes been visited and importuned by parents, brothers, friends political and friends religious, we have sacredly held to the above as a basis in the appointment of teachers, and, during the two years of my superintendency, I have not been asked by a member of our board of education to consent to the appointment, nor has an appointment been made of any teacher upon whose qualifications and fitness I had not at some previous time passed favorably.

Please do not gather from this that we have not had to fight to hold this position against pressure from various outside influences. In one case we fled to our State Superintendent for support, and we found him where you know he would stand, ready and able to sustain any movement for

the uplifting of the teaching force in his State; and he gave us a signal victory.

But normal schools and training classes, at their best, are not infallible. A few weeks since a teacher, who had attended one of our normal schools, —which one I do not know,—entered a commissioner's examination for a uniform certificate. The result showed that she possessed great absorbent qualities, at least, for she divided her subjects into *a*, *b*, *c*, *a'*, *b'*, *c'*, etc., without limit, yet in subject-matters her papers stood at twenty per cent.

This is no criticism upon the normal as a training school; it simply shows a lack of preparation and intelligence.

Another, a graduate of our own training class, gave promise of great success. She is an utter failure; and it fell to my hands, after granting her our city certificate last June, to inform her a few days since that we could not give her an appointment.

This question in its breadth involves the election or appointment of boards of education, as to whether each member shall represent a single ward or the city at large.

This phase of it I leave to others. I desire simply to add that as State and city superintendents, and commissioners of education, we can do more to correct existing evils, relating to this question, than we have in the past ever dreamed, and in support of this statement I need only point to our own State of New York. By his elevation of qualifications in the country and village schools of our State, Superintendent Draper has served notice on the cities to move up on these lines, and we have got to do it.

I have used the advance made in the rural schools of our locality during the past few years, and the position of our State Superintendent on these questions, as a strong argument in inducing our board to take advanced ground, and we have moved forward. The most serious question that confronts our city schools to-day is how to dispense with the services of incompetents of long standing,—those who never die, cannot or will not marry, and can, but will not, resign.

By legislative enactments,—by the zeal, earnestness, and strong help of our State departments,—and by the taking of sound and tenable positions on the part of city superintendents, we shall in a few short years reach a position from which we can look back and wonder why we halted so long.

MR. L. O. FOOSE, Harrisburg, Pa.: Owing to the limited time allowed me, I shall not attempt to discuss the admirable paper just read, but shall endeavor, briefly, to touch on one or two of the essential points of the subject under consideration.

I do not find as much difficulty in getting good teachers, at present, as I do in getting good work from many who have been long in the service, or in getting rid of them, but this is foreign to the subject.

The first essential point is to establish a standard of qualifications for city schools sufficiently high, and then gradually, but faithfully, and none the less surely, work up to it. This can generally be done during a series of years by exercising patience and vigilance. It, of course, requires tact and judgment on the part of a superintendent, and the influential members of the board, or committee, that appoints the teachers, with now and then, perhaps, prudent concessions for the sake of harmony and the success of the cause. In an experience of a number of years I have succeeded in this matter to the extent that only trained and experienced teachers are now employed in the city whose schools I have the honor to superintend. In establishing this standard of qualifications, scholarship has been made a leading requisite, though by no means the only one. This should be accurate in essentials, broad in a practical direction, and as far as possible the result of original inquiry and personal investigation. The professional requirements, when the applicant has not had successful experience in teaching, should be training, founded on a psychological basis, which will lead up to practical methods, develop tact and assurance, insure growth in professional lines, and round out a personality that will render its possessor strong in all that goes to make up good teaching.

The second essential point is the supply, which should be from all sources where strong teachers may be had. From those specially trained for city work in city training schools, from those trained in normal, or general training schools, and occasionally from those who have been doing advanced or university work. From home sources so as to stimulate and encourage home talent, strengthen the schools in the community, and reconcile those who advocate home production and home protection. From abroad so as to secure new life for the schools, to infuse new energy into the work, and to guard against the monotony of a dead level in methods and administration. From those who have met with success elsewhere, or who are specially strong in certain lines, and whose assistance will lift up and greatly magnify as well as dignify the work of the schools.

Care, of course, must be taken to secure those who have natural fitness for the work, as training without native force will at best result in very ordinary work, if not in total failure.

Much more could be said on these two points, but my time is up and I yield to others.

MR. D. W. HARLAN, Wilmington, Del., said that members of boards of education in many places would have to be made to see the necessity of professional training in a much clearer light than they do, before they would provide the needed facilities for such training. To do this is one of the ways of securing a supply of well-qualified teachers. He said that the common estimate of the time spent by teachers on their work is unjust and discouraging to faithful teachers. Two hundred days of five

hours is about all that many people give teachers credit for as a year's work.

He thought more expeditious ways of getting rid of teachers who will not or cannot give good service, much needed.

MR. WM. N. BARRINGER, Newark, N. J., wished to add two more questions, How to get rid of poor school principals, and how to get rid of poor school superintendents. He drew his answer from his experience on his father's farm when he was a boy. He had there learned that pulling weeds was hard work; that the more he pulled the daisies out of the grass-land the more the daisies grew, and that the better way was to plough them under, and sow the land with good clean seed. He did not worry about bad teachers overmuch. The badness of teaching in the schools might be the fault of the superintendent, whom he would advise to inquire within if he was inclined to worry over bad teaching. The superintendent of the right sort would hold teachers' meetings, come near to the teachers, help them, give them his sympathy and encouragement; meanwhile trusting to Providence and old bachelors to remove the incompetent.

MR. THOMAS WALTON, Philadelphia, Pa., who emphatically announced himself as a dweller in the "city of brotherly hate," had also learned by his experience on a farm that the longer you pulled weeds the more there were left. There were inefficient school principals and inefficient superintendents. He wished he might trust to the widows to take care of them. His main point was that there should be a law forbidding a teacher to teach after reaching the age of fifty. The teachers in service at any time should teach the next generation, not the generation after the next. He had had something to do with bringing Mr. MacAlister to Philadelphia.

MR. JOHN T. PRINCE, Agent Massachusetts State Board of Education: Three elements should enter the preparation for the teacher's profession,—first, knowledge of subjects to be taught, which is acquired in school and college; secondly, professional knowledge, acquired in the normal school and university; and, thirdly, professional training, acquired in the practice school and seminary. It is our duty as professional superintendents to keep as close to this standard of qualifications for teachers as possible. At least, we should protest with all our strength against the political nomination and election of teachers so frequent in many places. To be firm in this matter may cause the superintendent temporary annoyance, but in the end his opinions and recommendations will be respected. At least will he be possessed of that first element of true success,—self-respect in being guided by principles rather than by men who have no principles.

MR. C. W. BARDEEN, Syracuse, N. Y.: Mr. President,—I find it difficult to follow Mr. Anderson, because to discuss a paper one must find

something either to take issue with or to develop. I cannot take issue with him, because he stands upon precisely the ground I have always occupied,—that the one requisite for good teachers is discrimination in their employment. It is not a question of pensions; for pensions, after a certain amount of service, will make it only the more difficult to get rid of incompetent teachers, who wish to complete that term of service. It is not a question of hiring teachers within the city or outside the city, for, if a high standard of qualifications is maintained, the range of territory from which teachers are drawn will necessarily be large. It is not a question of who shall appoint the teachers. In the third largest city of our State the teachers are appointed absolutely by the superintendent, and yet there is no city in the State in which it is so difficult for a superintendent to exercise his own choice. I even know of a case where he desired to introduce a teacher for instruction in a certain branch, and was so unwilling to have it known that she came from without the city that he asked her to remove all luggage marks from her trunk. It is not a question of wages, for if only qualified teachers are hired the wages will take care of themselves. It is simply this one point,—of demanding a certain standard of qualification, and of choosing among all applicants those who approach it most closely. This standard of qualification should include, as Mr. Pierce has said, professional training, at least for city schools; and it would be well if at least one year's experience were required of every candidate before a permanent certificate was granted.

MR. T. M. BALLIET, Springfield, Mass.: Schools cannot be reformed by a wholesale discharge of old or incompetent teachers. There is probably as large a percentage of incompetent superintendents as of incompetent teachers, and it is often the incompetent superintendent that is most ready to recommend the discharge of the incompetent teacher. It is his only means of "reforming" schools. By all means have incompetent teachers discharged as soon as you are sure their incompetency is their own fault, and not the fault of the supervising officer, who fails to give them the proper direction, training, and help; or of the board of education, which fails to support them or even hampers and embarrasses them. The first and chief duty of a superintendent of schools is *to teach the teachers how to teach—to be a teacher of pedagogics.* A superintendent who cannot do this is out of place in his position. He must train teachers to observe children, to put their brains into their work, and he must arouse in them inspiration and aspiration. In this way many teachers who, without such personal stimulus, were "incompetent," will prove in the end to be among the most efficient teachers in the corps. I have personal knowledge of teachers of this character in several cities,—teachers who trace their "awakening" and "second birth" to the stimulus they received from a live, competent superintendent. The way to reform schools is: first, to

secure a competent superintendent; second, to let him "reform" all the teachers who are incompetent and can be "reformed;" thirdly, to bury the dead.

PRES. JAMES MACALISTER, of Philadelphia, gave an illustration in support of the doctrine maintained by the last speaker. Two important rules had been adopted by the Philadelphia Board of Education,—(1) that the superintendent should annually report for dismissal incompetent teachers, and (2) that the schools should be closed occasionally for teachers' meetings. Under the first rule he had done very little; and what little had been done had been most disagreeable business. Under the second rule he had done much. He had held many meetings, attendance upon which had been voluntary, but large and constantly increasing. What improvement had taken place in the schools of Philadelphia since the establishment of the superintendency had been due to these meetings more than to all other causes combined. Many good and faithful women there were, incompetent and inefficient indeed, but still teaching the best they knew how and up to the standard required of them when appointed many years ago. Will you turn these women out upon the streets, send them to the poor-house? So long as we have no pensions to give them, shall we not keep them in the schools? We must do so, and make the best we can of them.

The supreme thing is for the superintendent to be a teacher of teachers. There is power enough in our hands now. We must use it.

MR. S. T. DUTTON, Brookline, Mass: It is all important that persons who are to receive professional training should first have a thorough grounding in academic studies. This should be accomplished under a system that teaches how to study rather than how to cram.

In taking up professional work the student should be made to feel that *teaching* is a process of begetting life, and that the only means of mastering that process is by studying the individual child. I regret to say that our normal schools are not fully alive to this idea. They spend too much time and effort on the metaphysical side of psychology, and too little in considering the condition of child growth and the art of teaching.

The normal schools may well be more courageous and enterprising in pursuing fresh lines of experimentation and in finding a more complete adaptation of means to end.

Again, every town and city should inaugurate a systematic scheme for improving the quality of teaching. The superintendent should seek to create an atmosphere that is favorable to progress, and the active interest of every teacher in the corps should be enlisted. Let the teacher be emancipated from the bondage of examinations, and let them put the best that is in them into their teaching. The best element in school education is the influence of one human soul that is strong and free upon another. This

is always wanting where the school is run strictly on schedule time, like a railway train.

As regards the supply of teachers,—if we want to attract the best talent, the most cultured men and women to the profession,—we must open the doors to them and make the field as attractive as possible. A rigid system of State examinations may serve a good purpose in keeping out poor material from the teaching ranks; but I fear it may do some harm also in making the profession distasteful to the graduates of our universities.

MR. J. M. GREENWOOD, Kansas City, Mo.: I will present two points only,—(1) As to the qualification of the teacher; (2) A danger to be avoided in the appointment of teachers.

A teacher must be judged by the following standard,—the *richness* of her teaching, the *vitality* of her teaching, and the *stability* of her teaching. *Richness, vitality,* and *stability* explain themselves. They are the ideals which the true teacher endeavors to realize.

An element of weakness in city schools is the determination to fill all vacancies from local graduates who have been trained in these schools. Boards, through their short-sightedness in selecting their own graduates, thus weaken their schools beyond measure. From ten to twenty per cent. of the supply may with safety be drawn from home graduates, and the general efficiency of the schools not be lowered, yet any greater per cent. will be exceedingly detrimental. There is not a city in the United States, in which the exclusive system has been adopted, that has not impaired the working force of its schools.

Our children are entitled to the best instruction possible. New blood must be infused into a teaching corps, and this can be done by securing the best talent from the outside that the salaries will command. No Chinese walls should be built about a system of city schools.

DR. E. E. WHITE only desired to emphasize what had been so well said. The supply of the schools with competent teachers is the essential thing in school administration, and to this end teachers must come to their work through the door of normal training. It is high time that this principle was considered settled. Normal training must give the teacher a knowledge of guiding principles. He would give more for a young teacher who knows well a few fruitful principles of her art than for one with a head full of cut-and-dried methods. The soul of a child cannot be touched by pattern. Teaching is the art of arts.

Nor is it enough that teachers receive normal training before they enter upon their work. The art of teaching cannot be mastered in one or two years. The school-room should be a training school, and to this end the superintendent should be able to lead, instruct, and inspire teachers. He should set before teachers true and high ideals.

But in this guidance and training of teachers the principal is an impor-

tant factor. No superintendent is large enough to reach efficiently all of the teachers in a large city. He must depend largely on his associates in the supervisory office, and especially on the principals who stand nearest to the teachers. As a superintendent, the speaker has been somewhat discouraged on visiting a school presided over by a principal, well-meaning and earnest, but with little or no insight into true teaching. The instruction in most of the rooms was unsatisfactory. The superintendent's best instruction had not taken root. On visiting another school, with a live and competent principal, he had been delighted to find the work in the different rooms faced the right way, with cheering evidence of progress.

It is as important to have trained principals as trained teachers. The man who does not know the difference between word-cramming and mental training ought not to be at the head of a modern school, or a system of schools. We need normal institutions of a higher grade than our present normal schools,—institutions for the professional training of superintendents and principals as well as teachers.

Next to the selection and employment of competent teachers is the duty of retiring those who can neither teach nor learn to teach. But this duty is beset with peculiar difficulties. The schools in all our cities contain teachers who cannot teach. Some of these have done in the past excellent work, as measured by old standards; and they are not without reputation. Other teachers have become grooved in the service, and their minds have lost their cunning for new ideas and methods. All faithful teachers, whether successful or not, should be treated with consideration and kindness. In the course of his experience the speaker had secured the retirement of teachers without dismissing them, and this was usually possible when inefficiency is due to impaired health, old age, or other infirmity.

In this great work of elevating the professional attainments and efficiency of teachers we must be patient, provided we are making steady progress. It may take twenty-five years more to reach a reasonable standard. The schools are burdened with years of mistakes and ill-directed efforts. Their correction will require time.

PRES. G. STANLEY HALL, Worcester, Mass., had labored for years in the conviction that it is possible to raise the standard of teaching in this country in less than twenty-five years. Teaching should be not only a profession, but also now a mission. If somebody would heroically sacrifice himself, some good would come of it. The Vienna *Pedagogium* was a model we might copy. Its sessions are held afternoons, and attended by teachers after school. He had seen something of the same sort in New York City, which was working well under Dr. Jerome Allen. What is a profession? A body of expert knowledge and persons versed therein to profess it and apply it. It includes knowledge of history and princi-

ples of education, the present lack of which now in this country is deplorable.

We greatly need to know what is now going on elsewhere. That is what we need in Massachusetts, notwithstanding Mr. Martin's defence of that State. We need professors of this body of expert knowledge, but where are the men? He had been searching for them, but they were not to be found.

MR. S. A. ELLIS, Rochester, N. Y.: As the method of providing for a supply of trained teachers for the Rochester schools is somewhat unique, it may be of interest to this body of superintendents to learn how the work is done.

In 1883 the board of education organized a teachers' training class under the direction and control of the superintendent. From the graduates of these classes nearly all our teachers are chosen, it being a very difficult matter for one outside the city, at present, to secure an appointment. While this is to be regretted, it must be admitted as a fact.

A general view of the aim and plan of the teachers' training class is presented in the following outline:

1. Conditions of entrance.
2. Time.
3. Subjects.
4. Method of study.
5. Programme of weekly meeting.
6. Reference library.
7. Examination certificates.
8. Practice.

First. Each applicant for membership must be eighteen years of age, and must have received, at least, three years of academic training and hold a regents' preliminary certificate.

Second. The course embraces the forty weeks of the school year. The class meet for one hour each week to discuss the topic assigned the previous week.

Third. The subjects studied are—

(*a*) Education.

(*b*) Teacher's Qualifications.

(*c*) School Organization, Management, and Discipline.

(*d*) Duties of Teachers in Reference to the Physical, Moral, and Intellectual Well-being of Pupils.

(*e*) History of Pedagogy.

(*f*) Psychology in its Practical Application to Principles of Teaching.

(*g*) Methods of Teaching the Various School Branches.

(*h*) Moral Training.

Fourth. Questions upon each topic are arranged, printed, and distributed

to the class a week or more previous to the discussion of that topic. Members of the class are required to prepare for the discussion by the study of the books of any good author, by personal observation, by conversation with those who have given attention to the subject, and by their own thinking and reasoning.

Fifth.

(*a*) Roll call.

(*b*) Literary quotations from six or eight members of the class, and news items from an equal number, these having been previously appointed for the purpose.

(*c*) Reading of the minutes of the previous meeting by any one upon whom the leader may call, and additions and corrections, comments.

(*d*) The leader calls upon members of the class in turn (using cards), to answer and discuss the questions in the printed list, opportunity being given for voluntary remarks, or questions upon each topic thus discussed.

Sixth. Books of leading authors upon all subjects in the course of study form a reference library for the special use of the training class.

Seventh. A second-grade certificate is given to all members of the class who pass successfully the examination given at the close of the year's work, which is good for one year of teaching; at the expiration of that time, all who shall have demonstrated their ability to manage and instruct a class of pupils, receive a first-grade certificate, which makes them eligible to appointment to teach in any grade in the public schools below the high school, except as principal of a grammar school.

Eighth. All substitutes and temporary assistants are taken from the training class, as well as nearly all appointments to permanent positions.

The only certificates now recognized by the board, besides these issued to graduates of the training class, are New York State College and Normal School certificates.

As a result, our new teachers have more readily seized the reins of government, and have the sooner settled upon the best methods of instruction, while the tone of the whole body of our teachers has been gradually elevated. One of our older and most experienced principals remarked the other day that no one thing in the history of our schools had been of greater advantage to the management and instruction in our schools than the work of our training class.

At the present time nearly one-half of the teachers employed in our schools are graduates of our training class.

This has come about in less than eight years, which shows the changeable character of the teaching profession even in our larger cities.

THE CHAIRMAN (Superintendent Draper, of New York) thought it was almost useless to expect superintendents to accomplish much improvement in the qualifications of newly chosen teachers under existing conditions.

Nine-tenths of the city boards of education had both the power to certify and to employ teachers, and so long as they possessed these powers they would employ their own friends in preference to some one else's friends. Sometimes they would delegate to the superintendent the authority to examine and certify candidates, for the sake of disarming criticism, but they would influence the action of the superintendent either directly or indirectly.

What is needed is to give the superintendent independent, statutory powers, and charge him with the entire responsibility of examining and certifying candidates. Hold that the examining of candidates is professional work which can only be performed by an expert, and that the employment of them is a business matter, which may safely be transacted by any honest and fairly intelligent man, and you have accomplished much.

Again, what is needed is a system which will help and at the same time direct the superintendent. In our cities, the number of candidates for teachers' positions is so great, and the facilities for acquiring proficiency so many, that it is perfectly practicable to require that all candidates shall have completed the high school course and spent a year in a normal school or training class before being given authority to teach. We passed such a law in our State last winter. It was vetoed. But we will have it yet. Some of our cities are doing precisely this now without law. All can do it and have plenty of teachers. It is no hardship to young candidates. It will work incalculable advantage to the schools.

The time for *talking* about improving the teaching force has gone by; it is now time to take action which will effect what is imperatively needed.

MR. ANDERSON, author of the paper, closed the discussion, accepting the chairman's summing up of the matter, and in the hope of securing some definite action on the part of the Department, offered the following resolution:

Resolved, That in the opinion of the Department of Superintendence, the time has come when it is practicable to establish a professional standard for all teachers employed in city public schools, and the interests of education require school boards and superintendents to establish such a standard as an indispensable prerequisite to employment in the schools.

NATIONAL EDUCATIONAL ASSOCIATION: ITS ORGANIZATION AND FUNCTIONS.

BY W. T. HARRIS, PH. D.

Thirty-three years ago last August there met in the city of Philadelphia a handful of men to organize a National Teachers' Association. The movement started in New York and Massachusetts. A call had been issued and

widely circulated the year before (1856), inviting "all practical teachers in the North, the South, the East, the West, who are willing,"—these are its significant words,—"who are willing to unite in a general effort to promote the general welfare of our country by concentrating the wisdom and power of numerous minds and by distributing among all the accumulated experiences of all; who are ready to devote their energies and their means to advance the dignity, respectability, and usefulness of their calling." A constitution was drafted and adopted, and officers were elected for the following year. The directory of the newly formed Association voted to meet in Cincinnati in August, 1858. The noteworthy feature in the constitution adopted is the government of the Association by a board of directors elected at the annual meeting. This board was to consist of a large number of counsellors, one from each State, district, or Territory, together with the president, secretary, treasurer, and twelve vice-presidents. It also became the practice, even from this early meeting, to appoint a large nominating committee,—one member from each State represented in the convention. Inasmuch as it has frequently happened that only a single delegate was present from a State, the nominating committee has been obliged to fill out its extensive list of officers by naming its own members. The first president of the Association, as well as seven of the vice-presidents and two of the counsellors, ten in all, were members of the nominating committee that reported their names. While this strikes us at first as bad form, or even as dangerous to the usefulness of the Association, a moment's reflection convinces us that the danger is imaginary, and affects the form rather than the substance of the thing. If an entire assembly appoint itself on a nominating body, and then names all of its members to one office or another, it amounts to the same as a committee of the whole for the nomination of officers and a distribution of offices to all.

In later years, since the Association has grown to gigantic proportions, it is true that this large committee has dwindled in comparison to the size of the body it represents. But the fact that the rule requires that all the States, districts, and Territories shall be represented on the board of directors, secures a variety of interests in that board, which prevents the possibility of clannishness or misrule.

Should, however, it be deemed desirable to provide even a wider participation of the rank and file of the Association in the election of its directory, this could be easily effected by a constitutional provision permitting each State delegation to select its member of the nominating committee, leaving the president to select, as heretofore, for those States that decline or neglect to act. Practically, this would be a safeguard against any possible influence that might come from partisanship or political management, but it is quite difficult to conceive any circumstances wherein danger is to be apprehended from such source. All will

agree, however, that the highest usefulness of the Association depends on the complete subordination of the political partisan element.

We may here properly inquire what the legitimate results are for which we should look to come from this annual gathering of teachers from the length and breadth of the land. The main answer to this is provided for us in the words of the original call issued in 1856. In the language already quoted, the Association should "concentrate the wisdom and power of numerous minds, and distribute among all the experiences of all." This call was written by Dr. Daniel B. Hagar, then president of the Massachusetts Teachers' Association. It was stated at the Philadelphia meeting in 1857 that there were already in existence twenty-three State Teachers' Associations, besides larger and smaller associations not bounded by State lines,—such, for example, as the American Institute of Instruction in New England, and the American Association for the Advancement of Education, which had been formed in Philadelphia. These associations had demonstrated the value of general conferences in which educational topics were discussed. The wisdom and power of many minds concentrated on the difficult problems of the profession brought light such as none had seen before. The accumulated experience of all was thus distributed to each. The individual teacher, in his uneven development, strong in some points, and weak in others, found complementary strength in the experience of his fellow-teachers, strong where he was weak, and perhaps weak where he was strong.

The divine principle of vicariousness that prevails in the spiritual world, rendering it possible for each man, woman, and child to participate profitably in the experience of another human being,—so that the spectacle of a deed and its consequences renders it entirely unnecessary to perform the deed itself in order to get what of good comes from doing it as a life experience,—this divine principle of vicariousness in the life of human souls at once explains for us the true function of teachers' associations, and also the function of education itself in its entirety. What, indeed, is all education except the reënforcement of the individual by the experience of the family, the community, the nation, the race? Education is, therefore, properly defined as the elevation of the individual into participation in the life of the species.

While the brute inherits organically in his muscles and nerves and brain the experience of his progenitors in such a way that the life of his race appears as instinctive impulse, man, on the other hand, not only inherits the results of the life of his ancestry in the form of instincts and aspirations, but he can by language receive and communicate the outcome of his life direct. Hence his ability to collect within himself the results of others' lives is increased infinitely beyond that narrow line of hereditary descent; for he can, through language, avail himself of the sense-perception of others far removed in time and space, making himself thereby a sort of

omnipresence in space and time. Then, too, he can avail himself in like manner of the thoughts and reflections of his fellow-men, especially the thoughts and reflections of those most gifted minds that have done most to solve the problems of life and explain the anomalies of experience. More than this, too, he learns not only through their perceiving and by their thinking on what they perceive, but he learns by seeing their doing, and by the story of their doing, what to do himself and what to refrain from doing. Thus, by language, the individual is enabled to live vicariously the life of the race, and to live his own life vicariously for others. Whatever one does, goes into the reservoir of human experience as something of value; if it is a negative deed, bringing with it its punishment, the knowledge of it renders unnecessary the repetition of its like by others. If it is a positive deed, securing for it the normal development of the soul, then it is a precious discovery, and it may be adopted by all men as a new ethical form or moral law.

Thus the very principle of all education,—the principle that makes possible what we value as civilization in contrast to savage life,—this principle is appealed to as explaining and justifying the existence of a national educational association. "Concentrate the wisdom and power of numerous minds; distribute to each the accumulated experience of all."

Who can say, looking back down the ladder of thirty-three years, that this beneficent process of giving and receiving has not characterized every stage of its ascent? Spiritual giving, we are taught, is not a giving which diminishes the supply of the giver. In material giving, there is a transfer which makes him who gives poorer by the amount of his gift. But he who imparts his experience to others, possesses all the more firmly all the fruits of his own experience. Every teacher who has risen in this National Educational Association to expound his own observations or reflections, or to give the results of his experience, has, in the act of doing it, helped himself first of all to see more clearly than before the true lesson of his life. In spiritual participation, there is no division or loss. In material things,—in food, clothing, and shelter,—to share is to divide and diminish the part that goes to each.

But these general principles we may admit, and yet fail to see in the work of the National Educational Association anything worthy of being classed under such high rubrics. Let us, therefore, take up in detail, that all may recognize some of the phases of the teacher's work that have been under discussion at the annual gatherings.

I find, on looking over the table of contents of the annual volumes of proceedings, that there have been presented 241 papers on the five parts of the school system, namely: twenty-eight on the kindergartens, twenty-seven on primary work, seventy-five on high schools and colleges, fifty-six on normal schools, forty-five on manual training and technical schools.

These 241 papers have all related, incidentally, to matters of course of

study and methods. But besides these there were twenty-one papers relating especially to the philosophy of methods; eighty-one to various branches of the theory of education and psychology; twenty-nine to the course of study; ten to the peculiarities of graded and ungraded schools; twenty-five to musical instruction; ten to natural sciences; forty on drawing; and twenty-four to the important subject of moral and religious instruction. These make 240 additional papers on special themes of course of study and methods of discipline and management,—in the aggregate nearly 500 papers on these themes.

Besides these papers, there are others,—on building, heating, and ventilation, three; national aid to education, fourteen; education for Chinese, Indians, and colored people, eight; on supervision of schools, ten; on the uses and abuses of text-books, nine; on examinations of teachers and of pupils, eight; on compulsory education, three; foreign educational systems, ten; education and crime, two; on the best methods of keeping statistics, four; on the criticisms urged against our schools, eight; in all, nearly a hundred more papers on important questions.

We all remember with some remaining feelings of dismay the old-fashioned essays read at teachers' gatherings. The following titles will suggest them: "The Teachers' Motives"; "The Teacher and His Work"; "The Causes of Failure and Success in the Work of the Teacher"; "The Teacher's Ideal." Very often such titles introduced only goody-goody reflections on the personal character of the teacher. In the early days of the Association such essays were more frequent. One is glad to observe their growing rarity, not only in the National Educational Association, but also in State Associations and in educational magazines.

Of course these 600 papers, relating to various points of school management, were only the half of the intellectual pabulum set forth at the annual gatherings. It is safe to say that the impromptu discussions called forth were at least another half. Where the undisciplined mind had flagged and failed to follow the thread of the written discourse, the oral discussion brought out vividly the points of the paper, and by vigorous opposition or defence aroused the powers of the weakling. The vigorous oral debate has here its tremendous advantages over the printed paper read in the educational periodicals.

We have not mentioned the advantage of personal contact of mind with mind. In these gatherings the young teacher sees those who have grown old in the service and who have acquired reputation for their work. He meets his equals and measures their ideals by his own. He learns to see the details of his profession from many different points of view. The impression derived from the printed page differs from that derived from personal conversation. Each has its advantages. The personal impression is more stimulating and provocative of imitation. The cool study of the printed paper leads to deeper self-activity. Both are useful,—nay, indispensable.

It is obvious that for this personal lesson upon the teacher our recent large associations are far more valuable than the small gatherings of the early date; where three hundred met then, now we have three thousand. The visitor to the Association now sees ten times the number of eminent teachers, and rejoices in a tenfold opportunity for profit.

I do not think that I overestimate the value of this feature of the Educational Association when I call it one-half. On this basis I shall call the direct aid received from the essays and papers read one-fourth; the direct aid from the debates and discussions, one-fourth; the direct aid from personal conversation with and observation of fellow-members of the convention, eminent persons, and otherwise, this,—and the benefit of observation on that section of the country into which the Association takes the visitor, amounts to one-half the direct aid that he gets at the Association.

Since 1870 the Association has been in process of forming departments for the further specialization of work. It has done this partly by absorbing existing associations devoted to special work, and partly by forming new departments direct.

It absorbed the normal school and superintendents' associations, and in after years successively the departments of (*a*) higher instruction, (*b*) elementary instruction, (*c*) industrial education, (*d*) the National Council of Education, (*e*) the kindergarten, (*f*) of art education, (*g*) music instruction, and (*h*) secondary instruction; thus making ten departments in all. There has been since 1884 an educational exposition, which may be called the eleventh department.

Since these departments provide for the much-needed specialization of work, and furnish a counterpoise to the mighty swing of the general meetings of the Association, their influence is salutary. There is no doubt that much more can be done in this direction. There should be a department that unites those interested in the study of child life; another that unites the specialists who are at work in the mastery of foreign systems of education; one for students of the Herbartian educational experiments,—those that make so much of Robinson Crusoe as a centre of school work, and whose great word is "apperception." Those who have read the educational essay that has made so much noise in England, and which bears the absurd title of "A Pot of Green Feathers," I need not say, are already interested in this question of apperception, as the very centre of educational psychology. The doctrine of apperception, briefly stated, is this: We not only perceive or see objects, but we recognize or apperceive them. When we apperceive we relate what we see to what we already knew before,—we sometimes call this inward digestion of what we see. Now education, it is evident enough, deals with this matter of recognizing or assimilating (apperceiving) the new material learned by relating it to what we knew before.

If a department of psychology were formed that held two meetings at

each annual session, I doubt not that it would soon prepare some work which would gladly be given a place on the program of the General Association, and certainly before it secured a place on the general program it would get into the old departments of elementary instruction or normal instruction, or into the superintendents' section or some other.

I would lay emphasis on the specializing of work indefinitely. Apart from the National Association such specializing would have its danger; but in the Association it at once adds strength and gains strength. There could be a department of statistical study, wherein the few specialists who are interested in the science of statistics, in the new sense which is coming to be accentuated by sociologists, could confer together round a table. Round-table discussions over specialties is in my opinion what is needed to introduce a new fountain of vitality into the Association. Not that the Association is failing in vitality, for it never had so much at any former period as it has now. But this new element of specialization is a new element of vitality which may make the annual visit twice as valuable as it has been hitherto. I have mentioned by way of examples of these round-table departments,—those that should study child life, foreign systems of education (say French, German, English, Chinese, etc.), or pedagogical movements like that of the Herbartians, or, again, educational psychology, or statistics. I would add other examples of specialization. Let the specialists in teaching English literature have a round table; the specialists in teaching ancient history or modern history or the philosophy of history; the specialists in teaching French or any modern language; those specially interested in teaching fractions or any other part of arithmetic. These round-table discussions could be called for any year. They could not be expected to discuss the same subject for two consecutive years. Here is just the trouble with our present departments. They have worked over the material ready to hand, and have no new material in the process of making. The Council of Education has formed a list of committees on a variety of subjects and stereotyped it once for all. The members of those cast-iron committees find themselves appointed to report on some subject which has no new fresh interest for them, and they do not see how to begin fresh work. We do not want any more reports on such general topics as high schools, or private schools, or co-education, or moral education, or educational psychology, but we do want specialized reports which focus the whole mind of the sub-committees on some special topic, within those more general topics such as (in the domain of moral education) the freedom of the will in the light of Ribot's work on "The Diseases of the Will"; or (in the domain of educational psychology) the effect of committing to memory by the so-called aids or arts of memory; or on the formation of logical habits of thinking; or the best method of cultivating a convenient memory for names; the true remedy for duplicate registration of pupils attending both winter and summer schools, a duplication which is common

in most of the State school reports; on a legitimate mode of interesting the people in electing good members to the school board; on the proper manner of securing the interest of the public press in the good features of the public schools; on the effect of the private schools in raising or lowering the standard of respectability in the profession of teaching; on the best method of securing literary and scientific culture in a corps of teachers. No one of these topics would do for a second report; no one of them would do for a first report made by members of the council not interested in it. The volunteer system is the only system for round-table work. It would be best generally to concentrate attention, and guide it by having a report made upon some particular book like Lange's work on Apperception, or Mrs. Jacobi's book on Science and Language Study.

The general work of the Association, as a whole, should go on in deep ruts, but the special work of the departments should be specialized and always fresh and new. This will take care of itself if there be a sufficiency of these small groups encouraged. Perhaps there are only four persons in the entire nation interested in some special topic. The National Association, with its facilities for cheap transportation and cheap board, furnishes the best opportunity each year for the meeting of these four persons, or any other similarly interested four persons. Perhaps the attraction of the particular interest would not be sufficient to draw together the four specialists. But the National Association adds a host of other attractions, and in the aggregate these are strong enough to prevail.

We wish to produce as many growing teachers as possible,—as many as possible who each year have found fresh leads and have distanced their former selves.

It seems to me, therefore, quite doubtful whether the division of the National Association into sectional associations, with which it alternates biennially, would not be rather a step backward. It would perhaps break the continuity which is essential as a kind of background on which the specialization which we have discussed can best take place. It will certainly make the familiar faces that meet us from year to year, coming from a great distance,—as in the present meeting, from Colorado and Texas,—it will make these faces less familiar to us, and different sections of the Union will be in less direct sympathy than formerly.

If I have studied aright this problem, it is not the General Association that is in need of reform, but only the departments. These departments, instead of breaking away from the type of the General Association, as they should do, are imitating its organization when they ought to devote themselves to developing and fostering voluntary sub-committees or round tables devoted to special work.

The General Association, with its wide scope, its great masses, its distinguished personalities, its cheap fares, its entertaining tours, and its spectacle of great combination, and, lastly, with the great interest and substan-

tial tributes of respect which it elicits from the business men of all parts of the country, and from the world in general outside the scholastic field,—the General Association, with these reasons for being, should continue as it is.

DISCUSSION.

[Reported by Supt. S. T. Dutton, of Brookline, Mass.]

Supt. Aaron Gove, Denver, Col., spoke of the magnitude of the work of administration, much of which was of an exceedingly delicate and often embarrassing character. A declination to place upon the program the names of aspirants often engenders bitternesses.

The insistence of parties that financial remuneration be given for essays and travelling expenses is exceedingly common; the refusal, which in my judgment is proper, creates antagonisms.

The precarious condition of the treasury previous to the Madison meeting is well known; now the Association has in the treasury to exceed $25,000. Whether the possession of these funds is to promote the health and prosperity of the organization, I regard as a question yet to be answered.

Great care should be taken in selecting the directory. The burden which is laid on the executive is great at best, but it can be much lightened by a competent board of directors.

It has been intimated that the Association has become so large and unwieldy that soon it would separate into smaller local societies and cease to exist. The paper just read tells us why it should exist, and the meetings in later years fairly demonstrate that it is yet alive. There is no immediate prospect of a funeral.

Mr. J. M. Greenwood, Kansas City, Mo., favored special departments for original investigations. He recommended that the representatives of various sections make their addresses more historical in character and less eulogistic.

Dr. William A. Mowry, Boston, Mass., suggested that it were difficult to settle "live questions"; that if they were settled they would be dead, and no further interest would be manifested in regard to them. The fact that they are *alive* and not "settled" gives to them their value. Moreover, if this body with all its wisdom should attempt to settle any "live question" in which the people are interested, they would turn around and say to you: "Who authorized you to pronounce your ultimate dictum upon this subject?" and your opinion thus pronounced and questioned would be of as much value as the dictum of a Protestant pope. Let

the discussions go on. The value of these discussions, as they go out to the people, consists not in a *dictum*, not in "settling" questions, but in the strength and force of the arguments presented. These *arguments*, and these alone, have weight with the people in "settling live questions."

HON. JOHN HANCOCK, Ohio, advocated doing more and talking less. He thought some things were to be regarded as settled.

PRES. G. STANLEY HALL expressed his appreciation of the views set forth by Dr. Harris. He thought that waste might be avoided were this body to adopt some of the methods pursued by scientific academies in this country and in Europe, and referred in particular to some degree of specialization in studies of educational subjects, instancing as good examples: Canfield's admirable studies of the Relations between the State and the High School in each State in the Union; Draper's Study of the Early History of Schools in New York State; Greenwood's Studies of Children, which had attracted attention in Europe; Hartwell's admirable monograph on Physical Training; Blackmar on State Aid to Higher Education; Knight on Land Grants; Howard's Evolution of the University; Key's School and Health, etc., etc. There is no reason why, besides the mass meeting element, which is indispensable in the National Association, the sections should not be organized for far more effective work than now. Very much of the energy of this Association is wasted by threshing old straw, by random work, by people who have no conception of the best that has been said and done in their own subject. Nothing is more demoralizing and wasteful than to hear a half-hour paper of this sort. There is no association of teachers in the world so badly organized in this respect as those in this country. Even the French and German method of having one preannounced subject for an entire day and footing up the conclusions of the meeting in the form of a syllabus or resolutions, makes their reports more interesting and more valuable than ours. We should also have, in smaller circles or round tables, little groups of those interested in special topics, like psychology, geography, school hygiene, etc., to work and confer at unoccupied hours, and on a special plan, by methods somewhat like those employed in pedagogical seminaries in Europe.

DR. E. E. WHITE, of Ohio, supposed that the purpose of the discussion was to determine what changes, if any, were now needed in the organization and management of the National Educational Association. The changes suggested in the able paper, to which all had listened with so much interest, relate to details of administration. The special lines of inquiry and investigation suggested by Dr. Harris can all be provided for in the several departments now organized, and, if necessary, new departments can be added. The several departments of the Association were originally organized for the consideration of topics of special interest to their mem-

bership. This has been overlooked in some instances. What is needed is more specialization in these departments.

He was pleased to observe that no radical change in the organization of the General Association is recommended in the paper. The changes needed here relate to administration, and the most important of these relate to the program. It is easy to criticise a program when made, but it is not so easy to make a program that is above criticism. All will agree that no man should be asked as a compliment to himself or his locality to read a paper in the Association. The men who have something to say worthy of such a hearing should be sought out and called to this duty. The topics discussed should be vital topics,—topics of special present interest. What is needed is light, not rhetoric or declamation. One of these vital topics is moral training in the public schools,—a topic that needs to be discussed in a philosophic manner. Moral training should be placed on as sure a psychological basis as intellectual training.

HON. J. H. SHINN, of Arkansas, said: That so far as he was qualified to speak upon the paper of the learned Commissioner of Education, he should speak as an indorser and not as a critic. That the discussion so far had really added nothing to the paper in comprehension and hardly anything by extension. Dr. Harris asks us to continue the general work of the Association as it has been managed from the beginning, and to make the specialization of the departments still more special and possibly more thorough. So far as I have been correct in my diagnosis of the general work of the Association, so far I fully agree with the paper. The great general work of the National Association should go on in the same trend with a certain deepening of the ruts. Deepen the enthusiasm,—deepen the general regard,—deepen the educational ferment. Take the language of the doctor and make it a watchword: "On as we are, only deepen the ruts." As an addition he would suggest that the departments take on the special tint of special work and go deeper into the scientific nature of the great problems underlying the general work. He suggested as an additional work for the N. E. A. the gathering together at the end of each twenty-five years the particular papers upon special questions, and a generalization thereof by a committee specially appointed thereto. That this generalization, with all proper limitations, be published as the work of the Association and sold at the least price to teachers of the country. He thought that this would add to the real power of the Association and make it a surer multiple of good.

MR. W. R. GARRETT, State Superintendent of Tennessee, and President of the National Association: Mr. President,—I did not expect to address the Department, but I cannot refuse to respond to your invitation.

When your program announced that the Commissioner of Education would read a paper upon "The National Association: its Organization

and Functions," I looked forward with much interest and some anxiety to the expression of his opinions, for I know the weight which they carry with all our members and with the whole country. I have listened to him to-night with pleasure and satisfaction.

The clear and comprehensive view which he has presented of the Association and its functions, and the philosophical analysis which he has made of the elements of its usefulness, leave but little to be said by others. In his estimates of the relative value of its several elements, I do not think he has ranked the social features too high. Among the social features I understand him to include the excursion feature. Those who have been regular attendants upon our meetings have now travelled to every portion of the United States. I need not enlarge upon the pleasure of this feature to its members, or the benefit to the cause of education.

Why do ten thousand members attend our meetings? Why has this Association grown to be the largest, the grandest educational body in the world? It is because the members find in its meetings something which they need. It is because they love the Association. It is because it reaches their hearts as well as their heads.

We are fresh from the discussion of "Compulsory Education." Able educators have presented plans which, they tell us, will enforce the compulsory attendance of children. None of them, I think, would venture to propose a plan for the compulsory attendance of grown people. If we wish the Association to maintain its present grand proportions, we must not discard those features which reach the heart as well as the head. It must still continue to meet the wants and to please the tastes of its ten thousand members.

It is not surprising that objections are urged to different features of the Association, and suggestions are made for changes in its organization.

It is sometimes urged that the work is too general in its character; that it does not possess the definite and specific value of the work of some European societies. There is some force in this objection. I think that we should give heed to it.

Our departments are, however, becoming more special and technical in their work. The General Association can never do this sort of work, and ought not to do it. It has a grander purpose. It is a mass meeting. It is the foundation. Upon this foundation the various departments rest. I favor the introduction of special and technical work into the several departments, and the establishment of such other departments as may be needed to provide for more special work.

It is also argued that too much repetition is found in the papers read before the Association. Possibly there may be some force in the objection; yet, if true, it is not fatal. We are not a society of inventors. We are an association for the diffusion of knowledge. It is not necessary that everything which is brought before us should be either a fresh theory in phil-

osophy, never before presented to the public, or a brand new system of "new education."

It is also objected that papers, or addresses, or expressions, sometimes find their way into the proceedings of the Association which are not purely intellectual, but which betray some taint of sentiment or rhetoric. Fortunately this is true. I believe in rhetoric, so far as rhetoric means feeling or sentiment. I do not believe in bombast. I believe the great body of our members agree with me. From the human breast thought and impulse spring forth in one mingled ray as inseparably interwoven as the light and heat of the sun. We argue, as teachers, that the whole boy must be sent to school. It is even more true of the man. In voluntary schools the whole man must go to school. He is there with his head and his heart. Let both be addressed.

It is sometimes urged that the Association is becoming unwieldy, and will fall to pieces of its own weight. I do not fear its falling to pieces as long as ten thousand members attend its meetings. In the great law of growth and decay, we have not yet reached the period of decay.

It has been suggested that the Association should, of its own volition, divide into several sectional bodies, with annual meetings, from which delegates should be sent to a national body. This would convert our great national mass meeting into a body of delegates. I think there should be a national body of delegates, but not at the expense of our mass meeting. I should be willing to see a new department organized, to be known as the Department of Delegates, and which should consist of delegates from the several State Teachers' Associations and from other organized educational bodies, under such regulations as this Association might provide. Such a department could meet with us at the same time as the Council, or could hold separate meetings similar to those of the Department of Superintendence, and could do useful work in reflecting, assimilating, and formulating current educational sentiment. I am not willing to abandon our organization to effect these lesser objects.

This Association is a growth. It did not spring full-grown into being. It has grown by successive steps. At one of its early meetings only three members were present. At many of its meetings the attendance was small. Why has it now grown to be the grandest educational body in the world? It has grown because it has supplied a want; because it has adapted itself to the tastes of the educational public. It has grown from a teachers' association to be an educational association. It is a national association, and performs a work which no sectional association can perform.

I have more confidence in those institutions which have developed by growth than in those which are projected in future from the constructive imagination. In its immense but steady growth the great mass meeting has been the foundation. Upon this foundation the other features of the

Association have been built. Let us build what superstructures may be needed, but let us not undermine the foundation. My advice is, do not give up the great mass meeting.

ART EDUCATION IN THE PUBLIC SCHOOLS.

BY JAMES MACALISTER, LL.D., PRESIDENT DREXEL INSTITUTE OF ART, SCIENCE, AND INDUSTRY.

The social development of the last half century shows a steady growth in the recognition of the public school as one of the most important institutions of modern society. To the thoughtful man the future presents a number of social problems of the gravest import. Individual freedom from class and proscriptive tyranny has, in a broad sense, been secured. Public opinion, the aggregate of the majority of individual opinions, has become the sole basis of social order, and hence the binding force in modern society is what the majority of the people think or believe. We need to bring the full significance of this fact before us, and to consider that under this social dispensation all the baser elements of human nature are given as free play as are the higher elements, and that no man is restricted in his personal liberty until he encroaches upon the liberties of others, before we can adequately comprehend the supreme importance of public education to the modern state.

John Fiske made a valuable contribution to education, as well as to the doctrine of evolution, when he pointed out the meaning of infancy. In his suggestive treatment of this subject he asks this question: "What is the meaning of the fact that man is born into the world more helpless than any other creature, and needs, for a much longer season than any other living thing, the tender care and wise counsel of his elders? It is one of the most familiar of facts that man, alone among animals, exhibits a capacity for progress. That man is widely different from other animals in the length of his adolescence, and the utter helplessness of his babyhood is an equally familiar thing. Now, between these two commonplace facts, is there no connection? Is it a mere accident that the creature which is distinguished as progressive should also be distinguished as coming slowly to maturity, or is there a reason lying deep down in the nature of things why this should be so?" He then points out the great advantage that has come to the race through what he calls the period of *mental plasticity;* that is, the period of infancy, youth, and adolescence, forming nearly one-third of a human life, during which the individual is trained for his social duties.

The social condition of man has now reached a high degree of complexity. This social condition can be protected and properly developed, only so far as education provides for training the youth of a community for the duties and responsibilities incident thereto. With just as much thoroughness, with just as much care, we need, at the present time, to train our children to all that makes for high and noble living,—as the Greeks trained for the conditions existing in the Greek state, as the Romans trained for the conditions existing in the Roman state. So, also, we must recognize the supreme importance of training in all that makes for the highest intellectual culture and refinement in human life. With the absence of the militant power in our American state we base our institutions entirely upon the dominance of the moral and spiritual faculties among men. Indeed, our social and political organization rests wholly upon the belief that the majority of men prefer good to evil, virtue to vice, and if we take a broad view of the active forces in the social organism, we see on every hand virtue grappling with vice, justice struggling with injustice, and in these struggles we see that success can be hoped for only as all the higher faculties of man are brought into play upon the side of justice and of virtue. To state the problem in a few words: our duty is to so organize the forces that make for right living that they shall always be the dominant power in the social organism, and it is only when we come to recognize this condition as fundamental to all growth in human well-being that we can get a proper comprehension of what is involved in public education at the present time.

When the education of the people is looked at from this point of view, it is seen that its greatest power must be exerted where the dangers to the social organism are greatest,—that is, among the poorest classes. There is more need of the refining influences of the best education among the debased and neglected elements of population in our large cities than among the children of the rich and prosperous; and hence, the movement of the last few years to carry the most improved forms of our education among the lowest classes is an indication of the growth of public sentiment in the right direction, and is a feeling that will undoubtedly grow in strength as social problems are more carefully studied.

We have seen, in many parts of the country, the growth of a very praiseworthy sentiment in favor of raising the national flag over our schoolhouses. The spirit that prompted this movement was a patriotic one, and marks the growth of a national feeling stronger than that of local interests. To the educator it should stand for more than a mere loyal impulse. The flag should be made to represent more than the sovereign power and unity of the nation. Consider for a moment that in our large cities the great mass of the children see little or nothing of the government or the forces that bind society together, except as presented by the policeman. What better instrumentality is there for inculcating in the minds of the

young a respect for government and law than the school-house? If we can lead the pupils to understand that the school-house is provided by the State,—is provided for all, without distinction of race, condition, or creed; if we can make the school-house a place of delight, and if we can secure within it the right sort of instruction, the training that shall tend to develop the noblest qualities of mind and heart, we shall then be fostering not simply a love of country for its past history and the heroic deeds of our ancestors, but we shall be cultivating a love of country for what the country is doing for the children themselves in preparing them for the highest and best purposes in life. Then will the flag mean something personal to every child. Then will the government be to him not simply an abstraction, but he will come to regard it as his own great helper and sustainer. I welcome, therefore, this nationalization of the school as one of the most important of the educational movements of our time.

If, however, we make the school the symbol of the State to the children, we must have taught in it all that the child requires to enable him to become a virtuous and a useful citizen. I do not think there can be any gainsaying this proposition. Indeed, it follows logically from the very establishment of a public school, and in our day, when such important responsibilities are attached to citizenship, the public school and its instrumentalities must be measured solely by its capacity to realize its complete function.

Nearly all the States have limited the instruction that shall be given in public schools, and some confine it within very narrow bounds. But we are gradually outgrowing the restricted ideas of education of fifty years ago, and our more intelligent communities are already anticipating legislative action and are putting into their schools new subjects for study, new exercises which have for their object the development of the higher powers of the pupils, and the bringing them into the closest possible relations to the social needs of the future. Look for a moment at some of the movements that are going forward at the present time for enlarging the scope of public education. First we have the kindergarten, the recognition of the child in education, one of the most beneficent reforms that has ever come into the schools. Then we have physical training, the recognition of the fact that the citizen to have a healthy mind must also have a healthy body. Then we have the study of elementary science, which has for its object the bringing of the individual into the closest relations with his physical environment, that he may be able to enrich the world by his conquests over nature; that he may, to use the words of Bacon, become the "minister and interpreter of nature." Then we have industrial or manual training, which recognizes that labor is one of the conditions of man's existence in the world, and that it is through understanding labor, and putting thought into labor, that man is brought more

completely into sympathy with his fellows. Then we have the study of history, not simply as the record of man's military conquests, but rather as showing the steady development of the idea of brotherhood among men. And then, in addition to these, we have the instruction in art, in some respects the most important of all, because its influence tends to enrich the mind as a whole through the development and training of its highest faculties.

Now, cavil as we may against these new studies; argue, as many persons do, upon the limitations which are, or ought to be, imposed upon the State, all these features must come into the public schools, and in no niggardly way. They must come in on the broadest possible basis, or there is danger that the present tendencies of social progress will miscarry. That their introduction into the schools will revolutionize much of our existing education cannot be denied; but that need not give cause for serious regret. We may lay it down as a fundamental and incontestable proposition that existing social conditions demand these two things: First, the highest order of citizenship possible; and second, that public education must prepare for such citizenship at whatever cost.

I have prefaced these remarks because, in discussing "Art Education in the Public Schools," it has seemed desirable for the right understanding of the subject that it should be considered, not simply as a specialty in education, but rather in the larger aspect of one of the branches of general education that has become a necessity of our time. It is only by regarding the subject in its broadest relations that we can rightly consider how it should be treated in the schools. It will be understood that in so far as the elementary schools are concerned, I am using the term "art education" as limited to drawing and color.

Of the new studies referred to, art education is the one least understood, and yet it is the one that in many respects is the most important. Next to language, there is no branch whose scope and purpose is so far-reaching, or that bears more directly upon all that ministers to the best interests of the individual and of society. I am aware that many will regard this as far too inclusive a statement, and yet the history of civilization shows that the arts which deal with form and color have been at once of the highest value to man's utilitarian necessities and to those desires which nothing but the beautiful in nature and in art can satisfy. As a people, I think it will be admitted that we are deficient in art culture, and I do not think it will be denied that, in consequence, we are losing no small part of our intellectual heritage. This will not always be so. The indications are many that art is to have a new development in America, and on a new basis,—the basis of humanity. The putting of industrial training into the schools is a great step in this direction, and will surely give a higher idea and a nobler purpose to the labor of common life. The putting of art education into the schools, side by side with industrial training, will not

only give dignity to labor, but will also permit the human feeling born of labor to find fit and adequate expression.

The use of the term "art education" in connection with the public education has long been a great bugbear to many so-called practical people. To such persons the word art, in connection with the public schools, savors of something unpractical, something that is for special pupils, something for the benefit of the few rather than for the many; and yet a right understanding of the relations of art to daily life shows this to be an entire misconception of the subject. It is a fact apparent to every observing person that the social life of our people is lamentably wanting in an appreciation of the beautiful in nature as the highest truth of nature, and of the beautiful in human life and work as the highest truth of character. This is apparent in the homes, in the amusements, and in the social customs of our people generally. In the scramble for wealth that is going on, people are losing sight of the fundamental ethical principles that hold society together, and are making a pretence of living. Now, art education, which is the study of beauty as the highest truth in nature and in human life, can be directed powerfully against this social demoralization, and hence we should be prepared to advocate art education in the schools as a potent agency in the uplifting and improvement of the community.

Goethe says: "The beautiful is greater than the good, for it includes the good and adds something to it. It is the good made perfect and fitted with all the collateral perfections which make it a perfect thing." This is but a restatement of the old Platonic doctrine which still finds recognition in the most advanced theories of ethics and education. While we are extending our system of education on the utilitarian side, we must not forget that the right enjoyment of life,—that is, the exercise of the higher faculties,—is as much a function of living as earning one's daily bread; and for our education to be useful, in the true sense of the term, we cannot ignore the training of the æsthetic faculties as much for moral as for practical ends.

I have felt constrained to emphasize this aspect of the subject as of supreme importance at the present time, because in the general introduction of form-study and drawing into the schools there seems to prevail an idea that their chief value consists in subserving industrial ends, or as aids to other branches of instruction. The great value of form-study and drawing in industry, as well as their great use in educational training, can hardly be overestimated, but form-study and drawing as the basis of art education need to be considered in much broader relations than their applications in these directions.

Now, art in form and color is not an abstraction. It is something very tangible. It is man's creative work with material things; work in which he expresses himself, his power, his knowledge, his feelings, his ideas, for

the use and the enjoyment of others. With every child there is born some degree of this power of individual creation, and closely allied to it is another and complementary power, that of curiosity, or observation ; and it should be a principle in all general education to lay hold of these two great instinctive powers and give them free play in the training of every child. True art education distinctly recognizes these two mental powers as its starting point, and seeks to stimulate and direct them so that they shall act and react on each other, and result in the creation of beautiful things, not so much for the gratification of selfish or individual desires as for giving joy to others. The method of training for this end has a dual aspect. On the one side the child is led, through the exercise of his observing powers, to discover that beauty is the highest truth in all material things,—in fact, that there can be no beauty devoid of truth ; and, on the other side, he is trained to express his observation of the beautiful in creations that shall minister to the needs and pleasure of man. It has been truly said that sharing in some common enjoyment begets a more friendly feeling toward others than sharing in the same kind of knowledge.

Not until art education is viewed in these broader aspects can the subject take its rightful place in public education. For not until the psychological conditions for the training of the child are comprehended can a method of instruction in art suitable to children be devised, and not until its applications in social life are comprehended can the object of art in education be understood.

It is not necessary to dwell upon the fact that this view of art education does not present the subject as in any way antagonistic to its applications to industry, or to other branches of education. In fact, the more the subject is studied from this larger point of view the more will it be seen that its practical applications, both in industrial training and in general educational training, are greatly increased, because there is brought to its application in these directions the creative power of the pupils, enriched by the study of the beautiful, which is the life-giving principle in all industrial work, and the most subtle and refining force in all intellectual development and training.

With these points in mind, and in view of the wide introduction of drawing into the schools, a pertinent question arises here : Is the study coming into public education on the basis of art, or is it coming in on the basis of utility ? If we look at the history of the movement for introducing drawing into the schools, which began about twenty years ago, we shall see that it started upon a purely utilitarian or industrial basis. The movement, in its inception, was but a reflection,—in many respects a copy,—of the movement which was initiated about a score of years earlier in England, and which has been promoted there almost solely for the benefit of the manufacturing interests of Great Britain. As the movement has developed in this country, however, it is to be observed that it has been

steadily widening in character under the influences of educational thought and discussion. Experience has long made it apparent that drawing could not be maintained in the schools as a general study simply on the basis of its technical applications in industry. Consequently, the last ten years have shown important modifications of the instruction in the direction of bringing it into harmony with psychological principles. It was an important step in this direction when form-study, or the study of objects, was made the starting point in the instruction. Then drawing took its place as one of the means of expressing ideas of form, and in many of our principal cities the method of instruction has been radically changed so as to make the study of form in models and objects the fundamental feature of the work. Under this arrangement the various kinds of drawing, such as free-hand drawing, mechanical drawing, perspective drawing, decorative drawing, are of secondary consideration, and are governed entirely by what the children have studied and by the ideas they have to express resulting therefrom.

That this change is in the right direction will not be questioned by any one acquainted with the subject; but it will be a serious mistake to say that, because the method of teaching drawing has been changed so as to make it the expression of ideas derived from the study of objects, the problem of art education in the schools has been solved. In fact, it may be said that with this change of method the real problem confronts us from a new and a broader aspect than when we were dealing with the subject simply from the standpoint of drawing. Having reached the stage where drawing is regarded as but a means for the expression of form ideas derived from the study of objects, the vital point in the instruction now turns upon this question: What kind of objects shall we give the children to study for the development of the ideas to be expressed? It is not infrequently claimed that the interest of the child should be the guiding consideration here. That we should have regard for what shall attract and hold the attention of the pupil is not to be questioned; but it would be a great mistake to assume that this should be the only consideration.

If the love of the beautiful and the creation of the beautiful is the aim of the instruction, then it would seem that the objects given the pupils to study should be such as clearly present the characteristics of beauty. Now, some of the objects that most interest a child may be such as possess no distinctive features of beauty,—may be such as appeal to his selfish instincts or feelings. I am sure we shall all agree that such objects should not be chosen. But it is said that leaves, plants, flowers, fruit, interest children; and as beauty is found in the study of nature, natural forms should be given as the basis of the instruction. No one will dispute that in this art-training children should be given every possible opportunity to study nature; but in the choice of natural forms great care should be exercised in selecting only such as present, distinctly, beauty of

form. It should also be borne in mind that the study of nature for the purposes of art is a widely different thing from the study of nature for the purposes of science. In the scientific study of nature she is interrogated for her facts, and these facts may be found,—indeed, often are found,—in objects devoid of beauty. The facts, however, are none the less interesting from the scientific point of view. The scientific study of nature, therefore, is purely objective, and takes little or no account of the æsthetic elements which are involved in the observation of things from the standpoint of art.

In the artistic study of nature, however, the beautiful is the end sought; and the appreciation of the highest beauty in nature is realized only when it is perceived that the various objects in nature are fashioned upon certain type forms which express unity and purpose as the highest truths in nature,—truths that transcend all material manifestations and witness the supreme, eternal power that lies back of, and gives life to, nature. The natural objects are very few that express this truth, this beauty of nature, in all their details. They become beautiful only as they are seen in their typical relations. It is one of the functions of art to present the objects of nature, not in their accidental, but in their typical relations,—in other words, to interpret nature in her highest aspects, not simply to imitate her in her details. Hence the art study of nature becomes largely subjective, and is very different from the objective study of nature for the purposes of science.

If this principle be conceded, the question arises, What are the typical forms that the study of nature for art purposes reveals as the supreme content of nature? They are very few and they are very simple forms, namely,—the sphere, the cube, the cylinder, the ellipsoid, the ovoid, the prism, the cone, and the pyramid. The wonderful variety of forms which are observed in nature are but modifications of, or are derived from, these typical forms. These types, therefore, should be regarded as truths of form in nature just as distinctly as gravity is regarded as a truth of power in nature.

Now, if it be one of the functions of art to interpret beauty of form in nature, this beauty will be perceived in its highest aspects only as it is seen to be related to the highest truths of form in nature. Hence we are brought to the conclusion that as the typical forms referred to are the abstract embodiment of the highest truths of form in nature, they should be used in our elementary instruction as the best means of leading the children to discover and to realize the highest forms of beauty in the world of nature.

But the study of beauty in nature is only one phase of art education. The study of the beautiful in the creative works of man is quite as important a feature. The study of beauty of form in man's art work reveals the fact that it also is based upon the same typical forms that are found to

be the embodiment of the highest beauty of form in nature, and it is the manner in which man has utilized these types with his creative imagination in the production of works for use and enjoyment that gives to his art works their highest character and significance. Thus we are brought to the final conclusion that for art training, which is to include the study of the beautiful in nature and the beautiful in art, we must adopt the type forms of the sphere, the cube, the cylinder, the ellipsoid, the ovoid, the prism, the cone, the pyramid, as the abstract representatives of all beauty, whether in nature or in art, growing out of the truths of form. The eternal power that speaks through nature's works, invests these forms with life and gives to them their highest beauty. In art, man's imagination invests these forms with humanity, which is the very culmination of beauty in art. Beauty in nature and beauty in art are therefore in their ultimate analysis one, and rest upon the same unchanging truths of form.

If I rightly apprehend the instruction in form-study and drawing that is now finding its way into the schools, it is based upon the distinct recognition of these type forms as the fundamental verities for the training of children to perceive beauty of form in nature and in art; and it is the aim of the instruction so to connect the study of these typical forms with carefully selected natural forms and fine examples of art forms, that the children may be brought, through the legitimate and happy exercise of their observing and creative powers, under the influence of the beautiful, as the highest truth of nature and of art. This is not the occasion for the presentation of the details involved in carrying out this important work. This task may be left to the many able directors of drawing who in several of our leading cities are endeavoring to give to form-study and drawing the broad character here indicated, and who are laboring against great obstacles, arising from the general misconception of the subject which exists in the public mind and in the minds of some who are directing the schools. It seems the proper place, however, for the consideration of a few points whereby the instruction in the schools may be made more efficient.

To this end one fact must be distinctly recognized as fundamental to any substantial and permanent success,—that the instruction in the grades below the high school must be given by the regular class teachers. This is so obvious a fact in efficient school management as to need no argument. Following from this, however, are three very important points which I will venture to state.

First. A course of study should be prepared in which the orderly development of the subject through all the grades should be clearly presented. But few of the regular teachers have had any training in art worthy of the name. They need, therefore, to have it so presented that they may be able not only to become acquainted with the features to be taught in their respective grades, but also to see the unfolding of the subject

through all the grades. Not until the class teachers are able to take this comprehensive view of the work, not until they see that the study must be recognized as an organic feature in the general course, can they be expected to take an interest in it.

Second. The instruction in this subject in the schools should be under the direction of special directors of art education. These directors should be broadly educated persons. It is not enough that they have received training in technical art work. They should also be familiar with educational methods; with the general school conditions that surround the teaching of art in the public schools; and, above all, they should be able to interpret the work in its principles and methods to the class teachers as well as to criticise and supervise it.

Third. The schools need to be supplied with more and better objects for the children to study. The models of the type forms that are now being so generally introduced should be supplemented with casts of natural forms, artistically treated, so that the pupils in their individual study of natural forms may see proper specimens of the art rendering of nature, and also with reproductions of historical ornament, both in relief and in color, in order to afford opportunity for studying good examples of art work applied to the things of common life. In addition to these there should also be provided reproductions of choice vase forms from classic, renaissance, and oriental art. Man's realization of pure beauty of form and color has found one of its most pleasing modes of expression in fictile art, and as these vase forms can be shown to be developments under the influence of the feeling for beauty from the type forms we have been considering, and as they are full of historic associations, they will greatly interest the pupils, and can, therefore, be studied with much greater profit for purposes of object drawing than the miscellaneous objects, possessing no well-defined elements of beauty, that are too frequently placed before them.

With well-considered courses of instruction in art education, with the schools supplied with suitable materials and objects of study, with proper directors in charge of the work, we should see, I believe, a real art development in this country unexampled in the world's history.

Reference has already been made to the want of art culture among our people. This is one of the noticeable facts connected with our social life, and yet the student of history sees that man's creations in art are among his highest achievements, and that they are identified with his highest moral and spiritual development. In the perspective of history it is the art creations of Athens and Rome and Florence and Venice, enshrining as they do some of the loftiest conceptions of the human mind, that make these cities immortal in the memory of man. As a people we are ignorant of the uplifting and ennobling influence of art; and yet we have in our public school system the grandest opportunity that was ever given to carry a love for the beautiful into every home,—to make it the possession of

every man and woman in the land. But we may look into the future with hope. With the growth of our national power and the development of our material resources, we are broadening our education, and thereby opening the way for a better, a nobler, a happier existence for the people. We are putting into the schools those studies and methods that will powerfully help in transforming the conditions upon which the progress, the order, and the stability of the State depend. The kindergarten recognizes the humanity of the child. The study of science recognizes the world of nature as a Divine storehouse, filled with exhaustless treasures for ministering to the wants of man. The industrial training recognizes labor as fundamental alike to the freedom and independence of the individual, and the power and prosperity of the nation. Art education recognizes the beautiful as not only the supreme truth in the material world, but as a part of the supreme truth in the moral world, and that so far as it enters into the human life it is a Divine influence that purifies the hearts and souls of men.

The love of the beautiful, therefore, should be one of the finest results of our public education, and when art instruction shall be so incorporated into the schools that its rich, benign influence shall permeate the life of the whole people, we may then write over the door of every American school-house these inspiring words of Schiller:

> Create the beautiful, and seeds are sown
> For God-like flowers to man as yet unknown.

DISCUSSION.

[Reported by Supt. Eugene Bouton, Bridgeport, Mass.]

Dr. Thos. M. Balliet, Springfield, Mass.: Art historically grew out of the useful. Building for shelter preceded and led to architecture; representations of objects for practical purposes led to sculpture, drawing, and painting; the mere cries of the human voice developed into music. In education we must follow, in a sense, the order of development of art in the race. The beautiful must not be merely added in an external way, with a sort of plus sign to the other work of the school. It must be an outgrowth of all points of all lines of work,—*i.e.*, all lines of work in the school must have regard to the beautiful, and must be carried on with the beautiful in view. The drawing and sketching done in science work must not stop with the slavish reproduction of details merely which science requires, but it must be done in a way to lead up to the free delineation of objects characteristic of fine art. Manual training must aim at producing the useful in a way to be at the same time also the beautiful; history must be taught with literature, and especially the drama, constantly

in view. Literature, however, must not be made a "parsing exercise," as it has been made quite generally in schools and colleges. A philological or grammatical study of Hamlet will give you no more of art than would a chemical analysis of the Venus de Milo.

Two conditions are necessary to make art education in the public schools successful:

I. There must be placed in each school-room good reproductions of some of the best pieces of sculpture, of the best paintings, and of specimens of design and of historic ornament. We have not yet fully learned to appreciate the necessity of surrounding the child with beautiful things, so as to educate his æsthetic sense unconsciously.

II. There must be teachers placed in our schools who have souls. Unless art can be put into the soul of the teacher, it cannot be made to reach the soul of the child. I see no hope for art education in public schools as long as politics control the appointment of teachers, as is now the case in nearly all cities.

MR. J. H. HOOSE, Cortland, N. Y., said, in substance: I am an earnest advocate of art education, and am persuaded that the more the somber levels of this world are illuminated by beauty and goodness the better and happier will be one's journey through the paths of life. The paper is able, coming from a gentleman who enjoys justly an international reputation as a progressive educator. The very importance of the subject of art education compels critical investigation into the nature and scope of the matter before us.

I. In proceeding with this discussion, it should be stated that art proper is an exhibition of forms of spirit. A photograph is an imitation of him who sat; it lacks the spirit which radiates the personality. A person is said to be homely at first meeting; a moment's conversation, and the features and form are forgotten in the beauty and goodness of the spirit, soul, that shines out, "A little more than kin and less than kind." A camera never imprisons the sparkle of the eye of the man who is seen "in my mind's eye, Horatio"; nor can it enshrine the delicate richness of charm that circles about the head of "a wife in his eye." Besides, who of all this audience of fine-looking men, testified to yesterday by a member of the board of education of this city, would dare, under the rules of Grecian sculpture, to allow himself to be turned into cold marble and placed upon a pedestal to be looked at by the admiring gaze of an astonished world? Not one. We are too cadaverous, too rotund, too full in the girth, too short in the neck, too proportionless in the general contour. We seldom judge the man by the formal rules of art; we are estimated to be beautiful by standards of spiritual accomplishments and attainments.

II. Art connotes properly two ideas: (1) art proper, called sometimes high art; (2) industrial art, or that form which is known as utilitarian

art, appearing in the crafts of artisans and artificers. This industrial form of art is the product of conditions in the evolution of civilization; as population gravitates into centers and becomes more dense, the people must be taught to contribute to a livelihood,—new industries spring up,—imitative and decorative arts come into being. Ruskin did much to create activity in these lines. We in the United States shall emphasize industrial art when our country passes through the stages that evolved it in the history of European civilization. Art proper (1) always has been and always will be, probably, under the special prerogative and patronage of wealth, glaze as we may the history of the race. Industrial art (2) is the prerogative or lot of the wage-earner.

III. Æsthetical culture springs primarily out of the cultivation of the emotions and the imagination,—it is subjective; mental and ethical and industrial culture proceeds from the acquisition of facts and the cultivation of the reason,—it is essentially based upon the outward environment of man.

IV. Historically, what has been the effect of art upon the race? Dr. MacAlister quotes Goethe as saying: "The beautiful is greater than the good." Yet, in *Faust*, his greatest work of art, Goethe raises the good transcendentally above beauty as the supreme end of his creation. To subordinate the good to the beautiful is to turn backward the hand on the dial that notes the progress of the ages. The ideals of highest Christian thought are the good; those of the beautiful were in the ascendency in Greece, in pagan civilization. The doctor says, "No man can truly love and create the beautiful and be base." Does history teach this? Baseness is a moral attribute; beauty is an æsthetical characteristic of the nature of spirit. Is it true that moral excellence has been peculiarly inspired and guided by conceptions of mere beauty? Do the artists of the world constitute a galaxy *par excellence* of people whose conceptions of beauty have inspired and illuminated the deeds of moral grandeur, that have lifted up and ennobled human life as it has groped its way down the ages? Look at history. Conceptions of the beautiful saved neither Greece nor Rome from moral debasement. Nero was no mean artist, but he was a moral monster! Architecture reached the wonderful in India; but is Indian civilization a type of civilization for our enlightened days? Switzerland possesses marvels in beautiful environments; are her people the peculiar models of the highest forms of civilized life? Where is modern Italy standing in the midst of her possessions of the beautiful in art? Art did not develop in Holland until after she had conceived of the good in civil and religious freedom. Holland stands high in art to-day, but she is great, not for her art, but for her ideas of the good.

V. What are the public schools in which this art education is to be pursued? They are the schools of the people; they follow the conditions which determine centers of population. The school life of children lies

between the ages of five and fourteen. Pupils enter the army of wage-earners early in life. Youth leave school with their faculties immature; they cannot pursue successfully the field of art which is a subjective activity of emotion and imagination. Besides, these armies of children leave school to enter occupations that seldom stimulate art. From the best statistics at hand, trades and transportation are entered by 10.41 per cent. of the wage-earners recruited from the public schools; manufacturing, mining, mechanical industries absorb 22.06 per cent.; professional and personal services take 23.40 per cent.; agriculture, 44.10 per cent. Under all these circumstances of immaturity of mind and of nature of occupations, what are the probabilities, nay, the possibilities, of attainments in art proper in our public schools?

VI. Success in art education in our public schools is put in limbo by other conditions: (1) Systems of art instruction often tend to stifle and ultimately to quench the native freshness and versatility of the child's feeling and imagination upon which the soul of art rests. The system keeps the child so long upon artificial forms, straight lines, subdivision of parts, interminable analyses of elements, forced syntheses, that the activities, the artistic promptings, the yearnings of spirit for the beautiful and for the free that characterize normal childhood, become chilled into habits of form,—the child life becomes an ossified spontaniety,—art is dead. Prof. Corson, of Cornell, once said of a student of Anglo-Saxon, "He is so intensely analytic that he fails to be sympathetically synthetic." (2) Freedom of childhood activity is stiffened by other forms in which other subjects are taught in school. Take the case of art in language,—freedom of thought and speech. A child is bursting with warmth on some point; he talks in all the graces of art. Give him a pen; he drops the point upon his paper to utter the thoughts of his soul. See the workings of his mind,—he is revelling in luxury in subject-matter, but the school has emphasized so greatly the conventionalities of written forms that the moment his pen touches the paper, it is the signal for the advance of a cordon of rules in his memory: "Every sentence must begin with a capital letter"; "Heavy strokes down, light strokes up"; "The *d* and *t* must occupy two spaces"; "Small letters occupy one space"; "Every sentence must end with a period"; "Every word must be correctly spelled,—if you do not know, consult the dictionary"; "The sentences must not be too long, or too short, or too complex"; "Every statement must be a complete sentence." How much spontaneous freedom of the child's artistic feelings have percolated down through these limiting rules of the pedagogue? The child is awed by them, and his artistic graces of speech take on stupid and dead forms from the pen. What would Shakespeare have done if he had been obliged to begin his sentences with capital letters and spell words with uniformity and precision? The Elizabethan age of literature was characterized by freedom in the matter

of conventional forms. General Sherman stood alone among army officers in relieving his soldiers from troublesome dress and luggage and restraints in marching; he wanted his men at their best when they faced the foe,—this is freedom of spirit.* Good form in the conventionalities of written language is very desirable; but the spirit should not be quenched while the child is acquiring it.

VII. Art education should extend along the entire line of emotional life. Superintendent Balliet is right in desiring art culture in poetry, music, architecture. Art covers all these, and painting, sculpture, and language besides. Art education is grand, but art does not accompany all forms of activity. The mathematical computation or demonstration may be exact or logical; it cannot be artistic because of the nature of the matter. Accuracy is not art, it is business form. The exterior of the rifle may be made artistically, but the bore must be accurate. Let art flourish; let our strong Anglo-Saxon tongue be turned by our youth with all the graces of high art. Let art take place beside other subjects of study. But the highest forms of art are not of the beautiful, they are of the good. Home life in the United States should be made beautiful; but if our beloved country shall endure through the coming ages, its institutions must be founded on the Eternal Good. "For the power of beauty will sooner transform honesty from what it is to a bawd than the force of honesty can translate beauty into his likeness."—(*Hamlet*).

THE HIGHEST OFFICE OF DRAWING.

BY FRANK ABORN, DIRECTOR OF DRAWING, CLEVELAND, OHIO.

The fact that idiocy and insanity have been greatly modified, if they have not been entirely cured by cranial surgery,—taken in connection with the frequency with which marked effect in intellectual application is to be observed in the every-day walks of life, and for which there is no tangible cause except change of outward conditions,—justify the educational adoption of the theory, which is now accepted among psychologists, that brain is identical in kind, varying only in degree of efficiency in operation. This theory assumes brain and mind to be two very different things,—that are not to be confounded any more than the eye and the sight are to be regarded as in any way similar. The brain and the eye are organs, practically mechanisms, while the mind and the sight are simple results of the activity of the respective organs. An organ in its essential parts is an

* General George Crook, the celebrated Indian fighter, traveled in his campaigns in light array, "not carrying enough extra clothing to wad a shotgun." Here was freedom.

unalterable inheritance, while a result is an acquisition capable of the widest variation and the highest development. The structure of the brain, no more than that of the eye, is subject to man's creative skill. A nerve wanting, it cannot be supplied; both brain and eye, however perfect, are useless until, by exercise and employment, the capability to interpret results of brain activity is developed; and unfavorable tendencies, as sluggishness or improvidence of brain action, and inconvenient length of sight of the eye are to be avoided, and rendered impossible by the proper adjustment of requirements. That such adjustment of requirements is possible is proven by the fact that short-sighted sailors, hotel clerks with poor memories for events, women who are color ignorant, and printers who cannot spell, are as rare as birds with four legs and serpents that walk erect. To adopt this theory of the identity of brain-cells, it is plain, therefore, is not to assume all minds to be alike, for that would be contrary to fact and in no degree would it conform to every-day experiences. Saying that brain is alike in kind is similar to stating that water is water. Every brain-cell, like every molecule of water, contains a certain, definite and equal latent power, that acts exactly similar, with precisely equal force, directness, and impartiality. In adopting this theory I am not unmindful of the fact that water often holds foreign matter in solution. I do not forget for a moment that water is often contaminated; but for all that it still remains water, and each drop will give up its full quota of unadulterated power under certain, unalterable conditions. Neither do I lose sight of the fact that there are imperfections in the constitution, and, therefore, in the complexity of the action of the brain. I do not question that, beyond a doubt, brain is as frequently contaminated as water is. Perhaps it is never entirely perfect. But this in no way conflicts with the fact that brain remains brain while life lasts, or until, like water, it becomes something else, because of chemical change in its constitutional parts. The imperfections of the brain have neither more nor less effect upon the fundamental principles of education than the impurities of water have upon the undying truths of engineering. Perfection is not to be expected, and imperfections of the brain, no more than deficiencies and deformities of the body, are to be remedied by complaints; nor is the discovery of the effective means of eliminating brain defects likely to result from experiments made in conformity to any set of dogmas.

As the size and construction of steam-boilers and the fire-box and the kind of fuel to be consumed determine the volume of steam it is possible to generate in a given case, and the rapidity of the conversion of water into power, so do the anatomy, the temperament, the physical condition, and the nature of the intellectual diet determine the velocity of thought as well as the method and direction of intellectual application; but in no degree, nor in any way, can they or anything else induce any change in the kind or the quality of the intellectual power generated by the com-

bustion of brain-cells. Steam is steam the world over. It is power; and, because it is power, it is entirely irresponsible for the uses to which it is put. This is a fundamental truth universally accepted as applicable to all forces; and it is incumbent upon educators to give it the same weight as is everywhere accorded to it by engineers, or produce proof that intellectual energy is not power. Both thought and steam lend themselves with equal readiness to good and to bad, or to profitable and to unprofitable uses, but they themselves remain undefiled. They are unalterably pure. I do not wish to seem to argue, however, that all brains, any more than all steam-boilers, are equal in efficiency, or in capability even. It cannot appear after what precedes that I disregard the fact that the anatomy, and therefore the temperament, is to no small degree a matter of inheritance, nor would I seem to undervalue their effect upon mental operations. I would not be understood to say that all temperaments, physical conditions or environments are equally adapted to thought, in any one direction even, much less in all. It cannot be denied, either, as I have before intimated, that there are temperaments and conditions that predispose the thought, and thereby exert a potent influence upon the direction and efficiency of intellectual activity. It is true, also, that there are individual cases in which the bent of mind is so marked, so unlooked for from the breeding and environments, and which manifests itself so early in life, as to make it seem that neither conditions, associations nor inheritance ever had any influence whatever upon its development. In such cases, appearances to the casual observer seem to establish the fact that phenomenal, or special, intellectual development is in no case an acquisition, but is, at least in most cases, an out-and-out gift of nature. Whether it is a gift or an inheritance, or whether it is simply a direct educational result, is, however, a matter of slight moment; but, as it stands today, though as yet not substantiated to a demonstration, the balance of defensible evidence points decidedly to education as the cause without which there would be no intellectual development in any case. The popular notion that people are thoughtless is groundless. There is not sufficient evidence that there is anywhere any lack of thought. All men, women and children think incessantly. The difficulty, then, is not thoughtlessness but thought extravagance. The difference in intellectual efficiency is due to the fact that all thought is not equally well managed. Well controlled minds are rare and constitute the truly great. A few minds are efficient in one direction. But most minds, the nine hundred and ninety-nine, effervesce. Most people are endowed with such an overplus of animal life that they are profligate in thought and work as well as in manner. Hence, extravagance in all its forms is only a symptom. It is an effect, not a cause, and in education must be so treated. Energy may be directed but it cannot be controlled, except indirectly. Obstruct life, which is only composite energy in one direction, and it takes another; that other will

inevitably be the path which is next least obstructed ; and so it will continue to struggle until the broad, unobstructed sunshine of heaven is reached, or effort is relieved by death, life being subdued and conquered by obstructions.

A seed falling under a rock and germinating will seek sunlight. Its path may lie wholly or partially horizontal, or, perhaps, vertically downward, but invariably the shortest route to the light is taken, and an upward vertical growth is established and maintained as soon and as long as the light is the least obstructed in that direction. In reaching the light there may be many twists and turns, and many kinks in the stalk thereby will result which cannot be eradicated ; but, at whatever time in life and with such energy as remains, nature never fails, in above-ground growth, to take the shortest route to heaven's light. Intellectual power is one of the vital human forces. Kept in the path to heaven's true light, and it will grow and thrive and blossom and bear the fairest of nature's fruits. But it is a most precious and sensitive plant, and the strictest economy is demanded in the expenditure of its energies. If it is made a house plant, and we would have it anything more than a trifling ornament, we must be content to have its growth one-sided. For to turn it about each day that we may delight our eyes with the luxuriance of its foliage, and that each side may receive its share of sunlight from the window in turn, is to divest its vital energies from growth to turning itself about, and thereby render blossom and fruit impossible. To place the human plant where the light comes only from one direction, and to turn it about each day in order that each side may receive the light in succession, is to make the plant symmetrical but unfruitful. And so it is that many minds are sterile, though graceful to look upon. Such minds may be likened to open boilers generating more or less visible vapor. But the mass of minds are like steam-boilers generating more power than is required for the work assigned, and the surplus is improvidently expended in fretting, blowing, straining at the fittings and needlessly and unprofitably wearing the machinery. Mind and water will vaporize, as it were. This is inevitable ; and to so direct this vaporization of human energy that it shall acquire and exercise habitual control of itself, is the first of all educational duties. Individual cases prove nothing. It is more to the purpose to assume, in accordance with the spirit, at least, of the theory of similarity of brain, that genius is invariably an educational product induced by conditions and environments that have conduced to establish habitual, thorough, and genuine economy, than to assign its cause to some mysterious or supernatural agency. Each intellectual phenomenon should be studied with a view to discovering the educational possibilities, and to determining the practical time, form, and conditions of the most effective educational operations. But the accumulation of such data is impossible except as a result of systematic inquiry ; and the first step in this direction is to bring together

such facts as are accepted,—adopt a definite, tangible aim, select the able means, and devise the appropriate method of procedure. Until is much better evidence than appearances, or individual, personal fa and prejudice, produced against the theory of the similarity of bra must constitute the prime, fundamental, educational fact, to whic others are subordinate, and upon which all others must depend. To a this theory is to accord to thought all the attributes of force, and s it amenable to all the laws thereto pertaining. To accept the th the similarity of brain, as well as the concomitant one that inte energy is force, as primary facts, is to accept also the dependent f that thought invariably follows the line of least resistance, and th the brain is an essential part of a living organism, possessing the p rejuvenescence, thought is an organic force analogous to physical s the preservation and development of which is dependent upon c alternation of exercise, restoration and rest. These are simple themselves, but they have the widest educational significance establish with unmistakable clearness the exact limits of produ cational activity,—they make it entirely clear that education is exclusively to the adjustment of obstructions to intellectual dev They make the similarity between engineering and education plain; in that the one directs intellectual energies and overcon larities of temperament, while the other directs physical forces comes material obstructions. In the one, iron, stone, wood a are employed in the construction of bridges, dams and highway the other thought is employed in the analysis and synthesis images. With this understanding of education, all forms of compulsion are worse than useless, and all precepts and teachi accorded an infinitely less important part in elementary edu has hitherto been given to them. To accept this parallel bet tion and engineering renders it no less criminal for an educa an immediate appearance by specific rewards or punishmen for the engineer to secure a similar result in the appearance o an abutment by propping it with a stick at its back. Both worthy temporary purposes, and from both ultimate, imme aster is certain; but, unhappily, however deplorable the gi the abutment of a bridge, perhaps at a moment when it is living souls, might be, in the case of the child's character, a pose in life, the calamity inevitably resulting from deceptio the building by education, is incomparably greater. And t be too often urged, nor too strenuously pressed, that educat of all be honest. Thought is to be directed. It cannot be is to be guided. Nature cannot be deceived, nor will she and she is absolutely indifferent to any and all of our co the educator to find fault with the material placed in his h

to irritate the dog that bays the moon. The aim of education is plain and the result is predetermined by the means employed. Intellectual energy possesses all the attributes that are common to all forms of organic force. And since intellectual energy is analogous to physical strength, education demands that an apportionment of exercise, restoration and rest shall be adopted in intellectual training, similar to that which would be adapted to the symmetrical development and preservation of the physical faculties. The success with which this may be accomplished is predetermined by the nature of the immediate aim and the character of the method employed. For instance, that method is certain to be most successful which pays most regard to the appropriateness of the time, and the quality and the kind of each task and employment, and which makes no attempt to crowd or to urge anything; while that method is worse than a failure, it is a crime, which tolerates an overloading of the mind. The mind, it is true, similarly to the stomach, throws off what it cannot hold; nevertheless, as repeated undue taxing of the stomach tends to destroy its capability to perform its proper functions, so a similar crowding of the mind and teaching out of time is certain to bring on intellectual indigestion; and this is not the less likely to happen because the diet is so simple that it is insipid and unpalatable. The educator's business is not to force likes nor dislikes, but it is to so manage as to maintain a healthy state of mind. This is to be accomplished only by a proper adjustment of conditions and requirements, and success will be as certainly indicated by the curiosity, as the state of the body is indicated by the appetite. Curiosity is the intellectual barometer and is in every way accurate and reliable. There is not a particle of evidence that is entitled to a moment's credence to justify the assumption that there is anything whatever needed in elementary education except to win and to hold the child's hearty co-operation. That this is invariably given to the teacher whenever and wherever he deserves it, is a matter of common observation, and in refutation of this there can be nothing to present except blind bigotry and prejudice.

To accept intellectual energy to be an organic force is to determine the immediate aim of all elementary processes, which, under these conditions, can be no other than to secure the undivided application of thought in that direction which is best calculated to lead to the highest ultimate good. This being assured, all else may safely be left to time for its fulfillment; and educational progress is not to be measured by petty, partial products, however excellent, except they are the manifest, legitimate and timely fruit of the tree which bears them. Command of the intellectual faculties can only be a growth induced by the skillful adjustment of conditions that render it easier for the thought to habitually employ itself in concentrated form in profitable and well-chosen directions than to do otherwise; and progress is to be measured and gauged by the evidences of thought,—thrift in doing, than which nothing could be more tangible and

reliable. In elementary schools, at least, everything should be in a state of development simply, hence in them finished products are anomalous. This renders any exhibit of the legitimate educational work of children misleading and unsatisfactory, and makes it impossible to correctly estimate elementary school work, except by the local color on the spot,—similarly as one would judge of the condition of a field of growing grain. Educational investigation is no exception. Inquiry in this, no less than in physical and psychical research, demands that the inquirer adopt a defensible hypothesis or accept that which is best substantiated, as a basis, and proceed from this to separate the true from the false, and the practicable from the impracticable. It is only so that the establishment of an educational economy is possible; and it is only when there is an economy that elementary education rises above the narrow limits of charlatan empiricism. The theory of the similarity of brain does the same for education that the experiments of Watt did for engineering. It establishes the fact that intellectual energy is a definite force, and as such it is amenable to law. It lifts intellectual activity out of the realms of the mysterious and the indefinite. It sounds the knell of that most pernicious dogma of special intellectual endowments as an educational factor, both good and bad equally. It leaves no room in education for brutality, bigotry, prejudices, whims or fancies. It characterizes education as intellect engineering, and makes it incumbent upon the educator to lay out and maintain an unobstructed path leading to a thoroughly justifiable end. Education is control of the faculties. Mastery of the mind is the universal and infallible key to success. But the development of mind-masters can only be tardy and extravagant if it is made incidental to knowledge acquisition in the educational scheme, as it invariably is. Knowledge, like prodigality, is primarily an effect, not a cause. The one is the result of judicious and the other of heedless employment of thought. The accumulation of knowledge is the direct product of education. Indeed, there can be no education without knowledge,—it and control of faculty are vital parts of the same body; but the character of the educational accomplishment depends entirely upon which is made the prime object of attainment at the outset. It is no more practicable in education than it is in rifle-shooting to have two simultaneous immediate aims; and to seek knowledge before an appreciation of the economy of faculty control is established, at least in some degree, is to court certain educational disaster. The only possible result of the pursuit of knowledge, as a primary, educational means, is pedantic incompetence. The skill and accumulated wisdom of the ages is stored in books and works of art without end, and the secrets of nature reveal themselves with willing frankness to the true searcher after truth. But except there is sufficient appreciation of the value and necessity of brain control, coupled with courage to seek and to face the truth, to induce the habitual employment of both, all the store of noble thought and record

of grand achievement, as well as the infallibility of nature itself, avails nothing; for under any other conditions all efforts cannot fail to be misdirected, and all findings are sure to be misconstrued. Acquisition is play to him who can control his faculties. If immediate knowledge is the aim, then control of faculty is secondary, incidental, and incomplete. If control of faculty, or mind-masters, is the immediate aim, knowledge-acquisition is inevitable, symmetrical, rapid, and economical. And now the cause of that intellectual phenomenon, commonly called genius, being indeterminate, and there being no evidence against the theory of the similarity of brain, and knowing no defensible argument against assuming intellectual energy to be a natural force amenable to the one law of force in invariably following the line of least resistance, in order to make a fair start in educational construction, it is first demanded wherein lies such a path leading to intellectual development. It is required to know by or through the agency of what mental faculty will the employment of the intellectual force be most thorough and undivided. To ascertain this, to determine the line of least resistance to intellectual energy, is not difficult. To discover it, it will be only necessary for me to suggest an exercise. Let each one of us imagine himself at home; and, starting from thence, traverse in his mind, each one for himself, to the place of his daily *avocation*.

Each one will now observe the mental condition required for its *doing*. I especially desire that it be fully realized that the only condition in which it was possible for us to traverse this well-known and well-worn route in the imagination was one of complete and concentrated application of the entire strength of the intellectual energy. Another similar exercise, *going* to illustrate the extent of the intellectual concentration demanded by the employment of the imaginative faculties, is this: I will make any figure, an Arabic numeral two, for instance, on the blackboard here and ask *you* to look at it.

Let each one observe the form of this figure. I will *now* erase it and ask each one to try to see in his imagination the form and position on the board of the figure I have just erased. Let each one recall the character of the mental operation by which it was alone possible to see the contour of this simple, well-known, and familiar form in the imagination. It will be found to be nothing less than complete intellectual appropriation. This illustrates completely how exacting the imagination is in its insistence upon appropriating the entire intellectual energy, even in simple, commonplace matters; how much more unconquerably will it [illegible] demand whenever the attempt is made to imagine that which is less known and intricate bodies. Such simple [illegible] and innumerable others that each one can easily [illegible] plain that through the imaginative faculties [illegible] ity, and therefore the line of least resistance [illegible] through their employment there is not [illegible]

is entirely within bounds to say that nothing is understood, except it can be seen clearly, in all its aspects, in the imagination at will; and no problem can be solved until all the conditions and circumstances involved are seen in all their relations with the mind's eye. This is the key to the educational situation. The amount of time spent with books is of slight moment, and the profundity of the knowledge possession counts for very little. He alone is educated who practices habitual control of his faculties. He is an educated man who habitually holds his imagination on each problem until all its conditions, relations and requirements are vividly portrayed in a mental image. And primary education fails exactly in proportion as it is unsuccessful in accomplishing the firm establishment of a thorough appreciation of this fundamental fact. For to have acquired a thorough appreciation of the inestimable value of practical control of the imaginative faculties is to render all else possible. But even this, great and valuable as it is, and much as it involves as an educational result, it does not by any means constitute the educational sum total. Education cannot stop here. This is but the remotest outpost that guards the fair city of culture. The possession of the ability to concentrate the mental faculties, and added to this, the establishment of habitual exercise of this ability is insufficient. Even the thorough establishment of complete mastery of all the powers of body and mind, with that untouched and undeveloped which is infinitely more to be desired, is worse than useless. It is criminal. A simply educated man, a man having only control of his faculties and possessing all the knowledge which that implies, is a constant menace to society. Such a man is capable and liable to do immeasurable harm. Better a thousand uneducated than one uncultured man. Man is incomplete and education is a failure; it is a positive and unqualified curse to mankind, except together with intellectual power and control or knowledge there is developed, simultaneously, an emotional, a moral and a judicial establishment of intellectual bent of the highest order. There are no limits to the possible educational heights. "If we aim right we cannot go far wrong," writes Mr. Charles H. Moore, of Harvard. Let the immediate educational aim invariably be skillful employment of the imaginative faculties. Let the themes and the subject-matter be taken from the noblest and the purest literary and art products. Let the schoolmaster constantly direct the line of least resistance to intellectual activity, but let him leave to time the fulfillment. To this point all is clear,—so much is complete. But there still remains one element that as yet is unprovided for, which is essential to render the scheme entirely practicable. It remains to provide some means whereby it may be known to the schoolmaster in how far he is succeeding in directing the imagination. There needs to be some means of materializing the mental images, as it were, in order that it may be determinable at any and all times, with the utmost precision, exactly what is the direction and the degree of the thought exercised by the child.

The means to this end is language. Drawing is the language of form, and in its employment in the delineation of imagined form-aspects, from opposed standpoints of observation, it attains its highest office as an educational agent. To illustrate: If I had a class of children before me, I might, perhaps, draw Fig. 1 on the board and name a problem, which would be to describe a similar object from a different standpoint of observation. This problem, in the beginning, would probably be to describe the opposite aspect by a brief memorandum in lines. When the class had had time to do this, and had recorded in a memorandum their mental images of the solution required, I would draw a memorandum of my mental image for their comparison. (Fig. 2.) This being done,

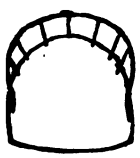


FIG. 1.

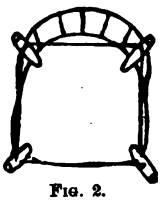


FIG. 2.

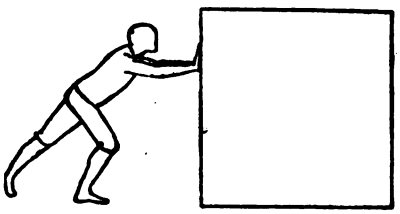


FIG. 3.

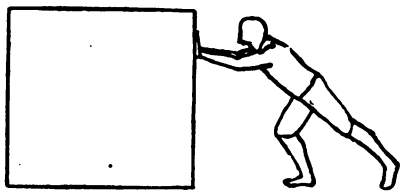


FIG. 4.

the opposite aspect of something else, as a man pushing a box (Fig. 3) might be required. And after a memorandum in lines of the solution had been recorded by the children, I would record my mental image on the board for their comparison. (Fig. 4.) Instead of the opposite, the front or back view (Figs. 5 and 6) might constitute the problem. Or it might be required to describe the top view. Or the aspect from below might be the one named. (Fig. 7.)

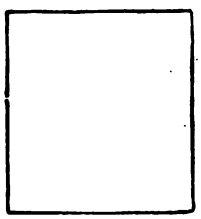


FIG. 5.

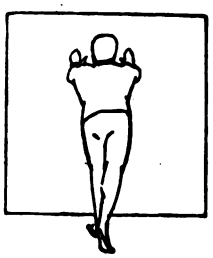


FIG. 6.

In the beginning the mind is only capable of comprehending the extreme and the striking. The savage appreciates only glaring contrasts. The child must be taken as he is, and if it requires the grotesque and the extravagant to enlist his

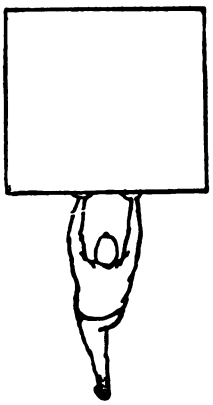


FIG. 7.

desire and to arouse his curiosity at the outset,—the funny, the ridiculous and the crude, if need be, must be employed. It is as idle for the educator to shoot over the heads of his pupils, as it were, as it is for the orator to speak and fail to adapt his language to his hearers' needs and ability; and it is not impossible that education might have been greatly forwarded beyond its present stage, if children were allowed to exercise the same discretionary power in regard to listening to teachers as is deemed the right of other auditors when he who talks is inconsistent, impractical, puerile, or insipid. The mind uniformly tires of everything except genuine progress. This is as true of children as it is of adults, and however crude the beginning may be, with simply proper direction of the line of least resistance, there can be no failure to progress toward better and thence to best. This is nature's way whenever and wherever the path in this direction is either unobstructed, or is less obstructed than any other. By this process of employing the imagination in drawing, as I have described, all the problems of perspective and orthographic projections may be orderly presented. Presently the child will have passed beyond the rudimentary stage, and nothing will avail or satisfy him except the most subtle problems, which can only be presented by great masters and are to be found only in their work. And now, finally, the whole matter of cultivation, in all its various departments, whether in stock-raising, horticulture, intellectual development, or what not, is strikingly similar in its essential methods. We may prune, but not incessantly, nor even rarely, and never out of time. We may plant the oak or the vine, and as we sow so shall we reap. We may set the lily in the ground, and, having done so, we may institute blighting conditions, or we may make the way clear for sun and shadow and rain and dew; and in strict accord, exactly in proportion to the relation and quality of the conditions which we establish, will it be blasted, or clothed as man never clothed anything. We may refrain from frustrating nature's perfect fulfillment, but man may not teach even the humblest of pasture weeds how to grow.

DISCUSSION.

[Reported by Supt. Eugene Bouton, Bridgeport, Conn.]

Supt. Charles E. Gorton, of Yonkers, N. Y., regarded this as inseparably connected with the theme of President MacAlister, and deemed it important to remember that "you can draw upon the imagination only so far as it has been stored with knowledge." He had been led by the preceding discussion to the reflection that the regular corps of teachers is so changing, that it is very difficult to have good work carried out. It is,

therefore, important to have the corps recruited from those capable of carrying out the desired work in art, and for such preparation the professional school should be responsible. In smaller places this is the more desirable on account of the small provision for supervision. The importance of home and school environment as an aid in art education was emphasized. To many of the pupils the school-house should teach better things than their homes can teach. The school-houses of this country ought to be educators in architecture and decoration. Superintendents should do their utmost to bring this about, and the study of drawing should be placed upon a thoroughly educational basis.

THE PUBLIC SCHOOL AND CIVIL SERVICE REFORM.

BY GEORGE WILLIAM CURTIS.

When my friend, the Superintendent of Public Instruction in the State of New York, who is also the President of this Association, asked me to speak to you this evening, I told him that nothing could surpass my willingness except my hesitation. I hesitated with the natural reluctance of a man who doubts whether even profound sympathy and interest in a good cause necessarily qualify him to speak to its masters and experts. But again, I felt that his own services to popular education were so valuable and distinguished as to make it the duty of any one whom he thought competent to aid him, however inadequately, in the good work not to decline. A good citizen is in this like a good soldier, that he repairs at once to the post of duty to which his superior officer assigns him; and in the cause of popular education there is no good citizen of New York who does not acknowledge the State Superintendent as his superior officer. Especially when my friend suggested that a subject to which I have given some thought was one which, in its application to our public school system, might not be altogether without interest for you, I was more emboldened to obey, because in addressing this Association, I recall the remark of the old English squire: "I like to talk with my rector, for in talking with him I am speaking to the whole parish." Every man might be proud and glad of the opportunity which you offer me, for he would know that in speaking to the higher officers of the public schools from every part of the Union he is talking to the whole country. If, indeed, the subject of civil service reform be more familiar to you in its connection with politics you will not fear that I may be betrayed into an untimely political address. For it is the happy distinction of this reform that it appeals with absolute impartiality to both the great parties; while hitherto, both the great

parties, like impecunious philanthropists accosted by what the old English law called a sturdy beggar, have been fain to reply to Reform: "Good Sir, I know the justice of your demand and I feel the righteousness of your appeal, but unluckily I have left my purse at home."

Civil service reform, indeed, is rather a question of polity than of politics. The evil with which it is concerned is the dangerous abuse of a necessary power of government, the power of appointing and removing public officers and employés. This is a power which has always struck at liberty, and no function of the State, therefore, requires more constant, more careful, and more stringent regulation. The story of the abuse is one of the most shameful pages in our history, with which I must assume your familiarity. We have learned by long experience that the evil known as the spoils system necessarily tends to destroy the self-respect of public servants and to brand the public service itself, so far as it involves this system, with a certain discredit. I appeal to your consciousness if this is not so. We shall all, indeed, agree that there are no nobler American gentlemen than many of those,—and we all have friends among them,—who bear the civil commission of the United States. But none know more fully than they that what the Czar of Russia said to Madame de Staël was true: "Sire," said the brilliant Frenchwoman, "surely a despotism may be beneficent." "Aye, madame," replied the emperor, "but 'tis only a happy accident." There is not a midshipman in the navy nor a lieutenant in the army who is not always and everywhere proud of the buttons and the gold lace that show him to be a military or naval officer of the United States, to whose guardianship the glory of the flag and the honor of the national name are entrusted. But in the civil service, under the curse of the spoils system, the words office-seeker and office-holder are terms of reproach, and to "take out of politics" any branch of the civil service has come to mean to take it out of corruption and make it honest and respectable. Yet, surely, the military or naval service is not in itself more honorable than the civil service of the State. The reproach which lurks in the name of office-holder does not spring from the function but from the tenure. In the civil service the incumbent does not hold, as in all other employments, by his own qualities, his merits, his intelligence, his ability, his integrity, and efficiency, but by the humiliating tenure of another man's pleasure, a man whom he may sometimes justly despise.

Civil service reform, therefore, is not a question of mere detail except as all administrative methods must necessarily involve details. It contemplates the greater simplicity, health, and vigor of the whole public service. It aims at the greater strength, dignity, economy, and efficiency of the complete commonwealth. It does not concern some thousands of clerks in executive departments merely, but the character of all public employment, the self-respect, the honor and welfare of the citizen, the true function of party, the true spirit of popular government. It assumes both

the executive desire to discharge the most important public duty from the highest public motives and the impossibility of executive omniscience. It assumes that personal preference and party interest and partisan influence are not aids, but hindrances, to the independent exercise of discretion in the discharge of duties which are not political, and the reform law, therefore, presents to the appointing authority for its final choice, irrespective of persons or parties and of every illicit and illegitimate consideration, only those candidates who have been proved to be fully fit and qualified for the duties of the place to be filled.

This is the reason and the method of civil service reform. Perhaps you have heard that it is the politics of the moon and the Sunday-school. I hope you have answered that although politics are always an alternative, yet that the politics of the moon are preferable to those of the pit, and the leadership of the Sunday-school better than that of the liquor saloon. Even in politics it is wiser to be on the side of the Decalogue and the Golden Rule than on the other side, and infinitely better to aim at the sun than to be afraid of being supercelestial. So pitiful is the condition to which this moral cancer of our political system has reduced political opinion in this country, that it seems often to hold, and, apparently, often honestly to hold, that nobody can speak of public virtue but a hypocrite, or commend political honesty but a knave. If sneers were arguments, the world would have been wind-bound long ago. When Columbus proposed to make the egg stand on end, the contemptuous philosophers sneered that only a fool would try to do it. When he did it, they sneered that any fool could do that. Happily, Jason, who tamed the fire-breathing bulls, did not fear their blasts. The man who, in pursuit of a wise reform, is afraid of the breath of the thing to be reformed, is already defeated.

Nothing is more familiar than the fact that the evil for which civil service reform offers a remedy is co-extensive with the whole domain of the public service. What is the fundamental and vital branch of that service? When one of the national political parties, whose last appeal to the country brought it into control of the administration, declared that the reformed system already established by law should be further extended to all grades of the public service to which it is applicable, the party certainly did not mean to include the public school system. But why not? To what branch of the public service is it more applicable? In the large sense of the public service maintained by general taxation for the public benefit, is there any department whose constantly greater efficiency is more vital to the national welfare than that which is represented in this Association? Are the custom-house and the post-office more important branches of the public service than the public school? Three centuries ago Martin Luther said that the German who would not send his children to school was a traitor to his country; and if, to-day, as Mr. James Russell

Parsons, Jr., Inspector of Academies in New York, tells us in a recent paper, the maintenance of schools is held in the German empire to be the first duty of the State, can it be a secondary duty in a republic?

If I were now addressing a naval or military council, or an assembly of customs collectors or treasury inspectors or postmasters or land or Indian agents, should I be speaking to a more important and influential representative body of public officers than that which I have the honor to address? If an intelligent American were asked what upon the whole is the true symbol of the American republic, what institution represents most distinctively the force which has been most vital in our marvellous national development, would he not answer at once, the common school? If we were all asked which of our institutions, after those of religion, we could least spare, whose disappearance would forecast the decay of liberty and the eclipse of civilization, should we not all unhesitatingly and unanimously reply, the public school? An ignorant people cannot long remain a free people. Three hundred years ago, in the Netherlands, Count John of Nassau, the brother of the great William the Silent, urging a system of common schools for "children of quality and for poor families," said: "Soldiers and patriots thus educated, with a true knowledge of God and a Christian conscience; item, churches and schools, good libraries, books and printing-presses, are better than all the armies, arsenals, armories, institutions, alliances, and treaties that can be had or imagined in the world." It was in that spirit and with that conviction that the seeds of our public school system were sown, and with a just instinct, when the suffrage in England was enlarged, twenty years ago, Robert Lowe exclaimed, "and now, gentlemen, let us teach our masters the alphabet." He knew whereof he affirmed. In 1802 Napoleon said to Pestalozzi that he could not be bothered with questions of A B C. Seventy years later the German army marched out of the school-house and destroyed the Napoleonic empire, while upon its ruins republican France began her national regeneration by reforming and reorganizing her schools. The alphabet is the ally of liberty, and in any accurate account of the forces that have made America, the public school must stand first.

If any branch of the public service, therefore, should be resolutely secured against every form of the abuse I have described, should be wholly independent of mere personal or partisan influence, and free from the malignant power of patronage or spoils, it is the public school system. But he knows little of the nature of spoils patronage who supposes that it would suffer any official system whatever to escape its ravages. Twenty years after the friends of King William III. declared abuse of patronage to be one of the reasons for the great English Revolution of 1688, *The Tatler*, the sparkling satirist of current English life, whose pages still show the very form and pressure of the time, describes little specimen notes addressed to men of influence, soliciting patronage, with the delightful in-

consequence of all such appeals. "Mr. John Taplash, having served all offices and being reduced to poverty, desires your vote for singing clerk of this parish." Another worthy man has ten children, "all of whom his wife has suckled herself—therefore humbly desires to be a schoolmaster." *The Tatler*, like its cheery successor *The Spectator*, chastised folly with a laugh. But has not that old English laugh of a hundred and eighty years ago a little sting for us Americans to-day? In countless American schools would not the laughing *Tatler* find hosts of masters employed, not for any fitness, but because their children were suckled by their mothers, or for some equally cogent reason? Is there any doubt that the same patronage which the glorious Revolution of 1688, as it was called, arraigned as subversive of English liberty, which the greatest American statesmen of all parties and sections, Washington, Adams, Henry Clay, Calhoun, Webster, and Abraham Lincoln, denounced as fatal to American institutions—the same patronage which, in obedience to public sentiment, Congress passed the reform bill of 1883 to curb and restrain—the patronage at which, speaking for intelligent Europe, Mr. Gladstone courteously expresses his wonder and amazement—the last relic in a free land of monarchial and aristocratic privilege, thrusts its insolent hand into the school-house as into the custom-house and the post-office, and every other public office, making the will of a trustee or member of a school committee or board of education, or some other spoilsmonger, the tenure of the teacher's employment?

If that be a mischievous, wasteful, demoralizing system in other branches of the public service, what is it in the school? Every other department deals with the public convenience, as the Post-Office; or with the public finances, as the Treasury; with the public estate, as the Interior Department; with foreign relations, as the State Department; with the public defense, as the War and Navy Departments; or with public litigation, as the Department of Justice. But the public school system pervades the whole country, penetrates every district, touches every village and neighborhood, and molds the ductile intelligence and character of the citizens of the future. If the fitness of a postmaster, of a customs collector, of a land agent, of an appraiser, is incontestably a public interest, to be ascertained with all practicable care and certainty, is the selection and fitness of the public school teacher of less concern to the commonwealth?

We can hardly expect a primary school teacher to say with St. Cyran, the head of the schools of Port Royal, "the charge of the soul of one of these little ones is a higher employment than the government of all the world." But certainly there should be as much care in selecting the teacher as in selecting a fourth-class clerk in a public office. For what is the key of an effective public school system? It is not the pupil, who is plastic material, but the artificer who shapes the material. It is not the school property, nor the appropriations for maintenance, indispensable as

they are. Reason, experience, the common consent of all great thinkers and all authorities upon the subject agree that the teacher is the school. All the wealth of India or of California could not provide a great school of any degree unless it could secure great teachers. Noble buildings, storied quadrangles, and ancient groves, munificent endowments, museums, laboratories, gymnasiums, libraries, the profuse accumulation of literary and scientific resource, without the teacher is but Pygmalion's statue uninspired, the body without the soul.

Not only are the teachers so important a body, but they are by far the most numerous body of public servants. Of the great national executive departments, the Post-Office is most generally diffused. Its service is coextensive with the national domain, and its legend, like that of the ancient Church, is *semper, ubique, omnibus.* But while there are about 63,000 postmasters in the United States, there are nearly one-half of that number of public school teachers in the State of New York alone, and in the United States there are 350,000 public school teachers. Their salaries amount to $81,000,000, which is probably more than the aggregate salaries of the rest of the civil service. For their own benefit, for the maintenance of free republican institutions, to transmit to their children unimpaired the great heritage of wisely organized civil and religious liberty which they received from their fathers, the citizens of this country tax themselves enormously every year to educate the children in the public schools; and the only return of this vast outlay for which they look is the intelligence and morality and the material prosperity which inevitably follows public intelligence and morality as the crops follow the quickening sun of April and the soft breath of May.

Is not every argument for the appointment of the great body of ministerial officers of the government by fitness and character wisely ascertained infinitely stronger when applied to the selection of school teachers? And if the selection of those officers by methods which secure their independence, promote their self-respect, and stimulate their interest and zeal, instead of destroying greatly increases the efficiency of the public service, elevates the tone of public employment, and removes a reproach from the national name, is it to be apprehended that similar care would harm the character and efficiency of the public schools? In other branches of the public service, whatever objections may be urged against the reformed system of appointment, it is undeniably better than the system which it supplants. Whatever foolish questions may be asked, whatever possible frauds practiced in an examination, they are wholly insignificant when compared with the unspeakable folly and the certain fraud of appointment by patronage or mere personal and partisan favor. There could not be a worse system of selection in all the other branches of the public service. Is it the best one for the great department of primary education?

Yet is it not substantially the present method? Teacherships in the schools are not popularly regarded as subjects of patronage. But are they not so practically and is it wise that they should remain so? What is the present system? I believe that the requirement of certification or license before appointment is universal in all the States of the Union. The examination upon which the certificate or license issues is, then, the cardinal point. What are the vital, essential conditions of effective examination? To be properly effective the examinations must be uniform, entirely competent, and wholly independent of the appointing power. The examiners must be sincerely interested in education, familiar with the duties of a teacher and with the requirements of the art of teaching, and capable of conducting an examination to ascertain both the scholastic attainments and the specific professional fitness of the candidates. Wherever these conditions do not exist, the public school system, and therefore the whole community, suffers. It is a common wrong, a common injury. The people of this country tax themselves heavily enough for the support of schools and teachers to entitle them to the best, and to the adoption of all means plainly necessary to secure the best. By whom, then, generally speaking, is this examination conducted?

By city boards of education and county commissioners, or trustees or committees, who are appointed by political officers or nominated by party conventions—these are the authorities who examine and certify or license and appoint more than ninety per cent. of the teachers. Is this a reasonable manner of securing public officers qualified for duties so delicate and important as those of teachers in the public schools? Is it a method which would be likely to secure the most competent service of any kind? There is indeed an examination, but the examining and certifying board is appointed by political officers or named by a party convention. Is a board so appointed likely to be a board peculiarly qualified to conduct such examinations? Is a party caucus generally intent upon such competence in the candidates whom it nominates? And when the board so nominated not only examines and certifies or licenses teachers but also appoints them, are such appointments generally or often made for fitness alone? I speak, of course, of a system, not of individuals. I know how many excellent men are selected even under this method, as I know that in other parts of the public service, under a similar system, most honest, industrious, and efficient officers and clerks were selected. But, as the old English judge said to the horse-thief, you are to be hung, not because you have stolen a horse, but that horses may not be stolen, so the spoils system should be abolished, not because fitness is never considered by it, but because fitness is not its object. Slaves were sometimes kindly treated, but kind treatment was not an argument for slavery.

The officers who are elected to conduct examinations and license and

employ teachers are notoriously often selected without any regard whatever to their special qualifications for a responsibility so great and for duties so vital. There is no limit of eligibility to membership in a board of education or a school committee, and it is probably true that the great multitude of officers appointed to conduct examinations, however well disposed, are totally unfitted properly to conduct them. Among public officers so nominated and elected the notable want of actual interest in education, of comprehensive views, of convictions, of actual information and knowledge of teaching are obviously incalculable. The ability to resist personal and political pressure and wrongful influence of every kind and of every degree must be as various as the men. There can be no common standard among them of requirement from a candidate. A candidate who fails in one district may succeed in the adjoining district. Good-nature, ignorance, indifference, and venality will constantly abuse and betray the great public trust committed to such officers. In every State, even in neighboring local communities, a uniform standard of competence will be impossible. Certificates will be granted, not upon proved qualification and merit alone, but often by personal or political influence, or the same insidious force will withhold the certificates. Is it not plain that under such a system in the department of schools, as in every other department where it is tolerated, the more conscientious and capable an officer may be, the greater will be his peril of exciting enmity and inviting his own dismissal?

A few years ago a committee of investigation into the management of a great public office by its own party friends reported that the number of persons employed was sometimes three times as large as was necessary, and recommended that half of the force should be dismissed. Political places are created as pensions for useless parasites. So in a school system where the evil practice prevails, not only will incompetence be certified, but the list of certification will surpass the demand. Perhaps it is supposed that a large eligible list is not disadvantageous. But what advantage is there in a copious choice of incompetent teachers who, because of incompetence, will cringe more abjectly and accept smaller wages? That is a strain which necessarily lowers the character, efficiency, and value of the schools. A competition not of merit but of low wages will follow, and not the salary only but the teaching will be cheapened, the standard lowered, and, like the marble statue with the feet of clay, the whole resplendent system of public education must be weakened by incapacity and inefficiency in the primary schools.

In a country where the system of spoils is gravely defended by eminent public men and party leaders as indispensable to the public welfare, has the door of the school-house a charm to stay its ravage? Its fatal results are known everywhere. Will they be unknown here? However simple and natural under earlier conditions in the country such a system may have been, and however in certain ways it may have answered the purpose,

is it the method which in our present situation, with larger experience and broader views and under radically changed conditions, we should deliberately adopt? Even when such a system was doing its best, it was but a yoke of oxen drawing the chariot of the sun.

Our public school system in its purpose and scope and general administration is our national pride, if not our glory. But, as Americans, fully comprehending what it is, is it not our first and patriotic duty to repair in it whatever imperfections may appear, that it may more and more effectively subserve its purpose? You know, gentlemen, undoubtedly better than I, that political patronage and personal interests and partialities, ignorance and indifference, and mercenary and illicit motives of all kinds do in some degree degrade and demoralize the public school system. You know that in the primary schools the seeds of our future America are sown, and you know how deep in that quick soil of childhood all ignoble dispositions may strike their roots, like poisonous weeds, and with what difficulty they are torn up. A teacher cannot cringe to a superior school officer and flatter and fawn for favor without a loss of self-respect which necessarily affects his manhood, destroys his enthusiasm, and unfits him for his duty. Can any patriotic American state one good reason why a system of selection which is entirely applicable and with the happiest results to every other branch of the public service, is unfitted for the most important branch of all, the public school? It is a simple, reasonable, and perfectly practicable system, and that its principle might be universally adopted for the selection of teachers is a proposition which does not seem to me to admit of debate.

Every objection and adverse argument that has been urged in the general discussion of the question of civil service reform in this country was anticipated in the English consideration of the same subject. The chief opposition, what I may call the last ditch of objection, was that no preliminary examination of general or special information could determine satisfactorily the fitness for his duties of a public officer of any degree. The conclusive reply to this objection was twofold: first, that there was simply a choice of alternatives, and that an impartial preliminary inquiry into fitness was better than no care or inquiry at all, which is the spoils system; and, second, that final appointment was to be made only after probation or actual test of capacity and fitness. So I can suppose it to be said that examination in scholarship would not test the more important qualifications of a teacher, which are the ability to awaken interest, to impart knowledge, and to keep order—the first and imperative requirement in the American school. But probation would test them as in other employments, and probation is a vital condition of the reformed system. The application of what we call the merit system to the schools is long established and familiar elsewhere. The elementary schools of Germany, for instance, are certainly among the best in the world, and every German

teacher must have had three or four years' training in a normal school, of which the standard is prescribed by the government, and after two years of provisional service he must pass a second practical examination before he is definitely installed in his work. This is the provision also in France and Austria; and in Ireland, as Mr. Jay, first President of the New York Civil Service Commission, states, the four national examiners of the public schools are selected by competitive examinations.

The comment upon such facts, perhaps, will be that America is not Germany, France, Austria, or Ireland, and that we are a law unto ourselves. True, but among the great qualities which have made America is the common sense which appropriates to American advantage whatever in any country in the world seems to be wise or useful. The habeas corpus and trial by jury were not rejected by us because they came from England. Gunpowder we have also found useful, although India, Arabia, England, or Germany invented it. We do not disdain printing, whether it was the child of Germany or of China; and the mariner's compass is ours as much as it is Italy's. As Bacon was said to have taken all knowledge for his province, so America takes all the world and all the wit and wisdom of mankind for its teacher. Germany is an empire and America is a republic; but if an empire has an admirable school system, nothing so well illustrates republican intelligence as careful observation of it and adaptation of such parts of it as commend themselves to republican judgment as suitable to republican institutions. We justly hold that teachers should be licensed and appointed upon examination. Then the examinations, the certificates, and the appointments should be absolutely free, so far as possible, from personal prejudice or favor, political and interested pressure, or other illegitimate influence. The teacher should feel and the public should know that his selection is due wholly to his proved fitness—a fitness ascertained by carefully considered, impartial, and impersonal tests. It is at least a dozen years too late to deny the value of such a method of selection. Its simplicity of operation, its effectiveness, and happy results are incontestable. Mr. Commissioner Roosevelt says that the spoils system has been practically extirpated in the department service in Washington, and the late Secretary of the Treasury, Mr. Windom, said of the reformed system: "Having been at the head of the department both before and after its adoption, I am able to judge by comparison of the two systems, and have no hesitation in pronouncing the present condition of affairs as preferable in all respects."

The public school system of the United States should not stand upon the shifting sands of the whims and prejudices and politics of the district caucus, but upon the solid rock of experience and reason. In every part of the Union it is essentially a State institution. It is maintained by the State upon the highest considerations for the general welfare. The State creates funds constitutionally inviolable, appropriates their income, and

lays specific taxes upon all the people for the support of the schools. For the same great and common purpose the authority of the State should secure uniformity of training and examination for teachers, and the examinations should be competitive as under the national law for other departments of the public service. In the State of New York great progress in this direction has been made in the voluntary adoption by the school commissioners throughout the State, at the suggestion of the Superintendent of Public Instruction, of uniform simultaneous examinations for teachers upon conditions essentially competitive. Three grades of certificates are issued; those of the lower grade only to candidates who reach a minimum of sixty marks in a possible hundred, in the two higher grades only to those who reach seventy-five marks. The State Superintendent in his report for this year says that "to this system more than to anything else, and perhaps more than to all other things taken together, is to be attributed the marked increase of interest in the work, the constantly advancing qualifications, the added attendance upon the normal schools and training classes which are everywhere manifest." Yet the superintendent concedes that the weakness of the scheme lies in the examination of the papers by the local commissioners, who are often elected without regard to their qualifications for such service, and who, even if qualified, differ greatly in their markings. He therefore recommends to the Legislature the passage of a law providing for the examination and rating of papers by a central board of examiners, as the papers of the academies and secondary schools in New York are examined in the office of the Regents of the University.

This recommendation, like that of the National Civil Service Commission, that the papers of the national service examinations should be examined in Washington, is wise, because a comprehensive and truly effective application of the principles of civil service reform to the public school system can be accomplished only by law. A general law of the State controlling the action of all school officers will alone avail; a system which shall provide an open competition of merit and secure a tenure beyond personal pleasure. Already, and with the same purpose as the uniform examinations for teachers' certificates, the Legislature of New York passed last year an act requiring that in no city or village having a Superintendent of Schools should any teacher be appointed who had not completed a high school course and been trained for at least a year in a normal school or a training class. This, too, was aimed at the vital point of certification and employment of proved competency only. The bill passed the Legislature but not the executive chamber. Yet it is a bright sign of that untiring American spirit which is not content with good, but reaches out for the better and presses forward and upward toward the best. This school movement in New York is in strict accord with the wise and generous progressive impulse of the time and country.

In such a matter the experience of one State will serve all the States. If in New York it be found that the fitness of the teachers and the efficiency of the schools are greatly increased by a system of simultaneous and uniform examinations for certificates upon paper prepared by the Department of Instruction, the same happy result would follow in Maine or in Texas. One of the fortunate consequences of our political union is that each State is an object lesson to all the States. In every chief department of public activity—in education, in charity, in the prison system, in the sanitary system—each State experiments for itself, and the Union is the beneficiary of the common intelligence and the common enterprise. No State wishes its public school system to be inferior to that of its neighbors, and if a neighbor takes a step in advance, the whole line instinctively moves, in military phrase, to dress upon it, and to obey the perpetual American order of the day in the old German field-marshal's phrase, "Forward, gentlemen."

Gentlemen, I cannot stand here in your presence to avail myself of the opportunity which you have generously offered me to plead for a reform which it seems to me in its wise application would greatly promote the welfare of the public school system, without a keener consciousness of the truth that the American public school is the true temple of the people. In every other branch of activity, in religion, in politics, in society, even in charity, we are all divided into sects and parties and clubs and cliques. But, in the public school, citizens of all sects and all parties, of all social sympathies and associations, meet on a common ground with a common interest and a common purpose. It is the American temple dedicated to what we believe the essential condition of popular government, an educated people. It is not that we suppose that education can take the place of personal honesty or national love of liberty, but that we believe it to be the means of ennobling personal character and strengthening public virtue. The State gives its children knowledge as a two-edged sword, indeed, with which they may either slay themselves or carve their way to the highest human service. The public school merely opens to the child that opportunity of training and developing his powers, his character, and his aims which comes from knowledge of human thought and achievement in all times and countries—an opportunity which he alone can improve for himself. The dignity, the influence, the power of the teacher's office, therefore, are incalculable. Like St. Peter, he holds the sacred keys. Is any public duty more transcendent than that of enabling the duties of that office to be discharged more satisfactorily, of constantly elevating it both in the respect of him who fills it and in the confidence and honor of the public for whom he holds it? Shall we spare any thought, any effort, any cost, to make the public school what we mean it to be, the corner-stone of the ever loftier and more splendid structure of political liberty, and to impress upon the teacher by our sympathy and care the central truth of the

school system that the child is educated by the State, not that he may read and write only, but that the trained power and noble intelligence of the American citizen may tend constantly more and more to purify and perpetuate the American republic?

UNIVERSITIES AND SCHOOLS.

BY SUPT. OSCAR H. COOPER, GALVESTON, TEXAS.

MR. PRESIDENT: Universities are the natural leaders of educational progress. Whatever their outward form may be, they are essentially democratic in their character and influence. Sham and shallow pretense cannot long survive where real university life has taken root. The debt of modern civilization to universities, from that of Athens, with its millennial history, to those of our own time, can hardly be overestimated. For the intellectual life of the world was kindled in that noble university of Athens, in which, amid the rise and fall of republic, kingdom, and empire, the aspiring youth of Greece, Rome, Asia, and Africa gathered to listen to Protagoras or Socrates or Plato or Aristotle, or some other of the illustrious teachers who made the Greek city famous for thirty generations as the seat of the greatest of ancient universities. Learning, science, literature, history have been preserved, perpetuated, and advanced from age to age by the universities which have thus passed on the torch of civilization. Paris and Bologna, Oxford and Cambridge, Berlin and Vienna—what would Europe do without these universities?

This country, too, young as it is, has been profoundly affected by its institutions for higher education. The highest social and political ideals have ever been cherished in the atmosphere of intellectual freedom, which is the vital air of the best university life. "The truth shall make you free" is the legend which should be inscribed over the entrance to every university, for truth is its aim and freedom its code.

My subject is not the influence and power of universities, but rather the relation of universities to our system of public education. I shall not enter upon the discussion of the question whether our system of public education is the outgrowth of the university spirit in this country, but I may profess my conviction that but for the universities and colleges we should have had no public school system; and while it is evident that universities do not depend directly, though they are doubtless directly benefited, by the existence of a good system of public schools, it is probably true that no good system of public schools could be developed in the absence of the influence of these higher institutions.

Of course, there are universities and universities. There are eight or

nine institutions in this country which are already rivaling the best of the Old World; there are three or four scores of good colleges of which some will doubtless become universities in the future; and there are some hundreds of so-called colleges and universities which run from pretty high grade college work down to poor ungraded common schools, whose claim to being higher institutions is based on the attempts of professors to teach what they do not know, and of students to learn what with such teaching they cannot comprehend. Such institutions need not be considered in this discussion, for I fear that only the evil they do will live after them.

I am thinking now only of the true universities in their relation to the general system of public instruction. These universities, whether under State direction or the control of trustees with the power of succession, or wholly or in part under the direction of the *alumni*, are in reality public institutions, in that they are all sensitive to public opinion, none being more so than those which are directed by self-perpetuating boards of trustees. And so the systems of public education, although they are limited legally to the several States, and although many of the cities are practically independent of the State in their school administrations, are nevertheless based on the same general principle administered in the same general way, and are developing under similar lines in all parts of the country. In education, at least, there is no North, no South, no East, and no West; no higher caste, no lower, save as it is made by excellence in the work done.

It seems to me that one may fairly claim that we have an American system of education. This system has been developed along the lines of freedom and individuality, yet it has been controlled in its development by the same general principles and animated by the same general purposes. Viewed as a whole, it is a ladder reaching from the gutter to the loftiest heights of human knowledge. It is my hope and desire to contribute something to the harmonious co-operation of those who are engaged in the higher, or special, and lower, or more general, work. For may it not be claimed with good reason that there is too wide a separation between the lower and the higher institutions, and that there is too little sympathy and co-operation between the workers in these fields? Do we not find many who are ready to urge the support and maintenance of the lower schools who have yet no disposition to foster the higher? And, on the other hand, do we not find many favoring the higher at the expense of the lower when even doubtful of the advantages of universal education? It has been my experience in a somewhat varied field to meet a good many persons of both classes; that is, a good many persons who have no sympathy with the fostering and support of the higher institutions, who are yet friendly to the lower; and others who, professing allegiance and giving their service to the higher institutions supported by the State, yet are opposing or maintaining a critical attitude toward the schools of the people.

Our system of public instruction, which has been developed within the last half-century in the United States, has become in large measure independent of our leading colleges and universities. These institutions, the colleges and universities, with their eyes turned toward the Old World, have been rather building up toward the ideals which have already been realized in the European universities, and have to some extent separated themselves from the great masses of the American people. This separation in sentiment and work between the universities and the lower schools, slight though it may be as yet, may have serious consequences and requires careful consideration. Is it the fault of the universities? Is it the fault of the public schools? Or is the spirit one which is inherent in the laws of development which govern both? The last, I think, is not the true explanation. The general diffusion of knowledge, universal education, is the object of the public schools, and is the object for which universities originally existed.

Time will not permit, nor have I, perhaps, the proper preparation to discuss all the elements involved in this problem. While professing my hearty allegiance to the university ideal and to the university life, yet in the present stage of development of this country I am compelled to believe that the public school is of more importance to the national life, at least in the immediate future, than its universities. I doubt whether many university men adequately realize the supreme importance of universal education, and of maintaining the agencies by which universal education is best secured. In their eager efforts to advance learning and to promote the education of those who come to their halls they have in some measure overlooked the wider movement without, and so have failed to cast their decisive influence in the direction of the improvement of the public school system of the country. More often public schools meet with criticism from men of this type than encouragement. Advice, if it be given, is of the severely critical character which repels rather than attracts those who would be most eager to avail themselves of wise counsel for the improvement of the schools.

Our programs should be shortened and enriched beyond question, and our methods of administration of the public schools are often far from satisfactory, but superficial criticism and off-hand discussion of these matters will do little beyond exasperating those whom they are intended to aid. For it cannot be denied that our public schools in many places have fallen into the hands of the veritable Philistines. Too often we find the men who are in control of public school administration destitute not only of real culture, but of a consciousness of their need. The work of the schools is made more and more an end in itself, pointing to nothing higher, and routine and mechanical device take the place of wise direction and enthusiastic, earnest, and capable teaching.

The time has come, it seems to me, for the colleges and universities of

this country to face the question of their responsibility to the system of public instruction of this country. The universities are popular, powerful, growing rich, and growing more and more in ability to influence public opinion. Some superficial university men seem to think that a crusade against the methods and aims to some extent of the public school will meet the need. Nothing could be more mistaken. The public school is too deeply rooted in our social organism and exerts too profound and far-reaching an influence on our national life to be handled in this flippant, off-hand way. The problem of the improvement of the schools is one which will tax not only the broadest culture, but the highest administrative skill.

So far as universities are concerned, then, the improvement of education will not be secured by criticism at public gatherings of the methods pursued and the results attained in the public schools. And yet I have no hope of any important advance in the methods, aims, and results of the public schools unless the earnest and active co-operation of our higher institutions can be secured in this work; for the improvement in the public schools, or in any system of education, will come only in response to a demand from above rather than from below, from man's higher nature rather than from his lower—and this demand must be created and enforced by men and women of liberal education.

What have the universities of this country done directly and consciously toward the improvement of our general system of education? Has this general improvement of the system of education entered into their programs as a part of the conscious purpose for which the university exists? This is a question of serious import. If my observation be correct, it may be safely asserted that this most important purpose for which a university should exist has been in large measure overlooked in the actual organization and administration even of our best institutions. For the highest institutions may influence and advance general education best by preparation, conscious and intentional, of those who shall direct and administer this general system of education. I find a strange absence of the teaching spirit in many of these institutions. Noble though their work is and healthful though their influence is on the highest life of this nation, and though they are as cities set upon a hill, yet there is a strange lack, in some of them if not all, of what should be the central life of the university work—the deliberate and conscious preparation of men and women for the work of teaching.

It seems to me that the matter has passed beyond the point of inquiry to the point of decision; that it is a part of the true function—indeed, a most important part of the true function of the university—to prepare those who are to administer systems of education and to teach the coming generation. Schools of pedagogy, schools of instruction in the sciences, that are alive to the art of teaching, should form a legitimate and essen-

tial part of every university curriculum. During the earlier history of our universities, when the population was small and the percentage of college graduates much larger than it is now, schools were largely supplied with teachers from the ranks of college men; and although there was less system, I suspect there was more effective teaching done, on the whole, in those days than in these. As the universities have grown in numbers and wealth, the style of living gradually changed and the circumstances of the masses of the people have improved, the number of young men of collegiate education who have devoted themselves, even for a brief period, to teaching has been diminishing, until they form at present a small proportion of those who are devoted to this calling, and thus the university influence over our general system of education has been growing steadily less as that system has developed in magnitude and importance.

The remedy for this state of things is, it seems to me, not far to seek. Let the universities take hold, in an earnest and vigorous way, of the problem of how best to train teachers; let them make the training of teachers an important part of the university's work. The tens of thousands of young men and women who flock to the short term, superficial normal schools which dot the West and Northwest show how keen is the desire of many of the brightest and most hopeful young men and women for adequate preparation for this important work. If, as Mr. Gladstone has said, teaching be the most intellectual of the professions, why should not a university, which is itself a teaching body, give attention in the organization of its curriculum to its most vital function? It is true that, so far as the art of teaching is concerned, more may be learned from a good teacher than from a good book on the theory of pedagogy. The same thing is true of chemistry or of physics or of any other science. If the personal presence of the living teacher were not an essential element in a liberal education, a large library would be more effective than Plato or Aristotle teaching in the Academe. The teachers of the United States would, I am sure, greet with proper appreciation and gratitude a movement on the part of our universities toward the recognition of their work as one of the leading learned professions—a recognition which will be secured by the establishment in these universities of properly equipped, well-manned schools of pedagogy.

Are not pedagogy and its allied sciences proper subjects for university education? Is history an important subject for university teaching, and is the history of education an unimportant one? Is not the history of education the art of the history of civilization? Is psychology a science to be studied in a university and to be taught by the ablest professors, but is such a practical knowledge of psychology as shall treat of its application to the wonderful and complex phenomena of the growing mind beyond the sphere of a university's work? Perhaps my interest in this subject leads me to see it out of its proper proportions, but if that were

not true, the universities themselves could do nothing, could take no step which would further their own development, which would deepen the character of the work done in them more than by establishing this central school for the study of the theory and the art of education. It does not seem incredible to me that a movement of this sort—especially if men of the right character, men full of the subject and of the love of teaching, were put in charge—would be followed by a wave of enthusiasm in the teaching profession such as that which gathered tens of thousands of students at the old University of Paris to listen to that marvelous teacher and leader of men, Abelard. Some of the short-term normal schools, so-called, in some of the Western States gather thousands of students annually, thus showing the demand already existing for inspiration and instruction in this noble work. Teaching is a part of the best work that men do. Universities may prepare men for the law, for medicine, for the ministry, for the many money-making professions and avocations which fill the business world; may they not also devote some of their energy and funds to the upbuilding of that profession for which the university exists? The establishment of schools of pedagogy in our leading universities would largely increase the number of men of college and university training who would enter the general school work. They would equip the men whom they send into the general school work so that the number of failures in the work would be small and the average preparation for the work greatly raised. They would close up the breach in feeling and effort which seems to be widening between the higher and lower institutions. They would, indirectly, largely promote their own usefulness by adding to the number of their students, probably doubling them within a few years. And they would, above all, give to our system of general education, whose fairest bloom and noblest fruitage have been developed in the sunlight of freedom, completeness and power which has not yet been seen in the history of the world's education.

DISCUSSION.

[Reported by Supt. W. H. Maxwell, Brooklyn, N. Y.]

Pres. Harrison E. Webster, Union College, Schenectady, N. Y.: I may as well say at the beginning that I agree with the views so admirably set forth by Superintendent Cooper in the paper just read. I do not see that there is any room for criticism. I do see that there may be practical difficulties, for some time to come, in the way of carrying out his ideas. The term "university," as used in the title of this paper, is somewhat misleading. In this country this word is used with great carelessness, one might say recklessness. All kinds of institutions are called universities.

I know of some cases where this name is used, and legally used, for institutions whose educational work is not above the grade of an ordinary high school. Even business schools make use of the term. In reality there is in this country but very little university education, properly so-called. Union College, over which I have to preside, has in late years been called a university, simply because certain professional schools (law, medicine, etc.) were legally joined to it. But the character of the instruction in each department remained unchanged by the union. It is not a university. The increase in the number of courses, the bringing together of a great number of students, the presence of many instructors, all this does not constitute a university. The work remains for each group of students, no matter how many groups there may be, distinctly undergraduate work. The idea that a college is looking university-wards, if one can use such an expression, because students from the first, or after some time spent in colleges, can choose from a great variety of subjects (courses or heterogeneous studies, as the case may be), does not change a college into a university. This method may be wise or unwise. For myself I think it unwise for the average student, but that does not matter. The college has its own place and work. The university has its own place and work. Nothing is gained by a misleading nomenclature, and much is lost. Much has been said in depreciation of the small colleges, especially the small western colleges. This, again, is wrong. Certainly, they are not as well equipped as the strong, rich, old colleges of the East. But they are doing an excellent work. Thousands of young men, who by no possibility could attend one of the older and undoubtedly better colleges, can and do attend their local institutions. In many cases the teachers in these colleges are graduates from the best colleges in the country. They do good work.

Nothing can be better established than that the colleges are entirely dependent on the secondary schools for their support and success. If the schools are weak, inefficient, the college that draws from them cannot have a high standard. The eastern colleges have been for many years demanding more and more of the preparatory schools. The requirements for admission to college have been increased; the age of graduation for the average student is much greater than it was in the past. Meantime, competition for places in life has become sharper than ever. And now the cry goes out, college graduates are too old; the course must be shortened; men must get into life earlier. And so they ought. But if a change is to be made, let it be in the requirements for admission to college, not in the length of the college course. Any college man will maintain that college life is worth more to a young man than life in a preparatory school, no matter how well conducted. As it seems to me, no greater mistake can be made than to shorten the college course. This, of course, for the average man. Every college course is arranged for the average man. The exceptional man—let him graduate whenever he has done his work.

There is one great trouble with the high schools. They are doing much of the work that ought to be done in colleges, and for this they have good grounds. Only a small number of the students in high school expect or intend to enter college. It is well that those who cannot enter any higher institution of learning should receive instruction in many branches which properly belong in the college course. But in every such school there ought to be a course arranged for young men and women who do intend to "go up higher." The time of preparation would then be much shortened, because many subjects would be omitted. This would encourage students to go on with their education. For many years I was a teacher of natural science in various colleges. I say without hesitation that better work can be done (in colleges) with a student who comes fresh to the subject than with one who through his high school training thinks that he understands the subject. I conclude in this wise:

In our high schools the teaching is excellent. All honor to those who give their lives to it. But there ought to be preparatory courses for colleges, including only such subjects as are required for admission to colleges.

That if any change is to be made so as to shorten the time for college students, it should be made in the preparatory course.

PROF. S. G. WILLIAMS, of Cornell University, in continuing the discussion, emphasized a statement of the paper, that educational progress had universally received its impulse from above, from whatever higher centres of learning anywhere existed. This was a most important consideration and one that ought never to be lost sight of in discussing the questions of higher learning; that the spread of civilization and enlightenment is ever downwards from higher levels; and that the lower and lowest masses, easily satisfied with small acquirements or absorbed in their material wants, are unconscious of their higher needs, and hence are unlikely to make unaided efforts to rise. This was well illustrated by the old mediæval universities, like Bologna, Paris, and Oxford. Meager and barren as what they taught seems to our modern eyes, they were a source of intellectual quickening at a time of deep mental darkness. Astonishing numbers of youth flocked to them from widely separated regions, and on their return home became centers of enlightenment to all around them. Thus these institutions began that elevation of the nations that resulted in the sixteenth-century renaissance.

It was of interest in this connection to observe that the earliest privilege conferred by the old universities, and the one most coveted, was the "*licencia docendi*," or the right of teaching anywhere in Christendom. That is, they sent armies of teachers into an ignorant world, and these, though often poorly equipped and far from respectable, like the "Vagants," made it far less difficult to get instruction of some sort than De Nogent

describes it in the last half of the century which preceded the rise of universities. This interesting function of the universities has been very little improved upon in principle until the present century, when we have become conscious that the art of so presenting knowledge that it shall become to the learner a source of intellectual strength and spiritual elevation, is at least as essential to the teacher as knowledge itself. It is only within the past eighteen years that higher institutions in English-speaking countries have recognized their duty to provide properly equipped teachers in this latter sense; and it is interesting to note how rapidly the idea has borne fruit in Scotland, in England, and in the United States. Already in this country we see chairs of pedagogy established in three of the foremost institutions of New York, one in Philadelphia, and several in the great and prosperous States of the West, in Iowa first of all.

The term *higher institutions* was designedly used, because the speaker believed it must be conceded that we had yet no university pure and simple, *i. e.*, one in which all subjects offered were opened freely to the choice of students that they might select therefrom what they believed best suited to their intellectual wants or their professional intentions. Our oldest and most richly-endowed institutions are still modeled more or less on the college idea of prescribed courses. Yet there is a notable progress university-wards in not a few of them,—for example, in Harvard, Columbia, Cornell, and some others, in throwing open the higher culture-studies to free selections. Evolution in this direction will doubtless proceed by the sloughing off of the lower reaches of study, and all that is rigidly prescribed, leaving these to the college proper, where they properly belong; and when this process is finished, and complete freedom of higher study is accorded to the student, then will the American university be completely differentiated from the college, and each without rivalry will do its own proper work.

The early universities grew up about famous schools of some specialty,—*e. g.* Bologna from a school of law, and Paris from a school of theology,—to which were added by subsequent accretions, instruction in the other subjects of intellectual interest to those times. Thus arose the four faculties of arts, theology, law, and medicine. But the higher needs of later ages are by no means circumscribed within these time-honored limits. The progress of arts and industries has created an imperative need of high professional training, especially in architecture, agriculture, and the several lines of engineering. Provision for these not being made in existing universities, the tendency has been to establish for them special schools. This tendency, the speaker believed, should be discouraged. All professional studies should be placed on an equal footing by the university of the future,—that young men engaged in any specialty might enjoy the inestimable advantage of rubbing their brains against those of men with widely different views, and so gain a truer estimate

of the relations of their own calling to all other objects of human interest.

Prof. Williams did not wish to conclude his remarks without expressing his disagreement with what he thought the too exclusive emphasis laid by a previous speaker on languages and mathematics as college studies. Great and worthy departments of study, both of them, but by no means all. We may conveniently assemble school studies and employments into five great groups, viz.: Language, in which the vernacular should be emphasized, the sciences of nature, history, mathematics, and those employments which call into play the manual capabilities while they cultivate taste. Now, while he was ready to concede that language should receive a larger measure of attention than any of the others on account of its very great importance, he did not believe that subjects from any one of these groups should be absent from any portion of the prescribed curriculum, from primary grade to college. Thus only could we best train up men who should add all-sided interests to the complete command of all their faculties. The exhaustive study of any group is of course impossible, but the *method* and spirit of all may be sufficiently mastered; and this mastery is essential both for its spiritual benefits, and for future independent work at the true university.

Finally, the speaker believed that, by complete and conscious recognition of its *primacy* in educational progress, of its duty in the pedagogical preparation of the higher class of teachers, and of the propriety of including within its scope every high class of human interests, and by encouraging, as they well may, an all-sided culture in all educational establishments below them,—the great American universities towards which we are rapidly growing, would fully meet the not unreasonable demands of the excellent and thoughtful paper under discussion.

Mr. Nicholas Murray Butler, of Columbia College and the New York College for the Training of Teachers, said that one of the most interesting chapters in the history of modern education, when it comes to be written, will be the account of the working out of a system of education, elementary and higher, in the United States, suited to the needs and characteristics of the people. The marked difference at the present time between the general educational organization in this country and in Europe is to be found in the fact that in Europe the elementary school is not as a rule in complete co-ordination with the secondary school and the university; while in the United States the connection between the elementary and the secondary school is complete, but that between the secondary school and the university is wanting. Therefore, the specific problem in educational organization that the American people have to deal with at the present time is the co-ordinating of the secondary and the superior instruction. This will be done by the high schools, the academies, and

the colleges. In this organization the American college will always continue to occupy a prominent place. The American college has no exact counterpart in Europe. It has grown up here as an indigenous institution. Organized originally as a high school, it has grown and developed until it has come in some instances dangerously near being a university. It is this fact, the fact that the college has occupied an uncertain and highly unstable position, that has led to so much confusion in our language and our thought regarding superior instruction. The college should rest upon the high school, and should not raise its requirements for admission to such an extent that high school graduates may not pass easily and naturally into it. The contemporary demand for a shortening of the time devoted to obtaining both a college and a professional education is a sound one, and must be heeded. The shortening, however, should not take place at the expense of residence in college. That is in many ways the most valuable feature of American higher education. It cannot be sacrificed without gravest loss. The problem can best be met by welding the college and the professional school together, and admitting certain preliminary professional studies, as electives, into the course leading to the degree of Bachelor of Arts.

The university is a wholly different institution from the college, and while in this country we have scores of nominal universities, the real ones may be counted on the fingers of a single hand. A college, in which the course of study is elective wholly or in part, is not a university. A group of professional or technical schools is not a university. A college and a group of professional and technical schools taken together is not a university. A university must have for its heart and soul the great philosophical faculty of the Germans; the faculty which finds its reason for existence in the preservation of the humanities and in a careful and loving study of philosophy, philology, and letters. A university is marked by the time-honored freedom in teaching, and freedom in study; it knows no trammels, no compulsion. It is not a disciplinary institution, but rather a field for research and investigation. At the university the bounds of knowledge will be continually widened, and the leaders of the future generation in science and literature trained to their work. Professional schools or faculties, apart from the philosophical faculty, have always become technical and narrow,—it is the philosophical faculty that is the real university centre. Its spirit and insight must regulate and inspire all of the associated faculties.

The university owes a duty to the teaching profession. Originally the university did nothing but train teachers. The original examination for graduation, if one may call it such, was nothing but a test to enable the student to pass from the ranks of the *scholars discentes* to those of the *scholars docentes*. One of the great struggles in early university history was that concerning granting the privileges of the degree to persons who

could pass the examination, but had no desire to teach. This extension of the university privileges was wise, but it has gone so far that the duty to the teaching profession has been forgotten. Now, in this country and within the last decade, attempts are making to have the university, wherever it is found, undertake again the inspiration of the teaching profession. At many of our universities chairs of pedagogy are being established. Thought is being devoted to the question. The movement is a great one, and is destined to grow. The great obstacle to its advance is found in the lack of men trained to undertake these high and responsible positions. We need men to devote themselves to the study of education in order to represent it in the universities and make its development complete. When this is done, the university will not only be the apex and crown of the American educational system, but it will be its life and heart. From this highest institution will go out lines of influence and strength to the lower, welding them together into a consistent and coherent whole.

SUPT. EUGENE BOUTON, Bridgeport, Conn., claimed that what was left out of the high school was also, as a rule, omitted in college. He had received no instruction in botany in the high school, and the omission had not been supplied in college. Students could receive no instruction in music during the college course. Preparatory schools should teach everything required in practical life.

MR. GEORGE H. MARTIN, Massachusetts, claimed that it is not true that all influence has been from above downwards. The lower institutions have profoundly affected the higher. The establishment of departments of pedagogy in universities has been the result of demands made upon them by the representatives of the public schools. This influence has come from below.

PRES. G. STANLEY HALL, of Clark University, said that there is a disastrous chasm between the university and the schools. On one side of it we find the Philistinism of the common school teacher; on the other the exclusiveness of the university man. He had asked the leaders of high education in Massachusetts to attend the next meeting of the National Association at Toronto, but many of the replies were not encouraging. He had had to stand some suspicion himself at the hands of his university brethren because he had made a practice of attending teachers' meetings. The chief disease to-day of the educational system of America is the isolation between the higher and the lower elements. There are, however, hopeful signs on both sides that the interregnum of divergence is drawing to a close. He had seen three hundred teachers of the public schools of New York and vicinity receiving admirable instruction in a school of pedagogy in New York. He exhorted his hearers, however, to try to understand the many and great difficulties which the authorities of a university have

to meet in establishing schools of pedagogy. The great difficulty in Baltimore, when he was professor of pedagogy in the Johns Hopkins University, was to find young men who would devote themselves to pedagogy. And yet the field is most inviting to any one who will devote himself to it. Never before was there such an opportunity for any young man who will burn his bridges behind him, and devote himself heart and soul to the history and philosophy of education.

WHAT PRESENT MEANS ARE AVAILABLE FOR THE PREPARATION OF TEACHERS FOR THEIR WORK.

BY STATE SUPERINTENDENT HENRY SABIN, OF IOWA.

The purpose of this paper is to deal with real, actual conditions. The past is past.

A wise providence has put into the hands of to-morrow the power to care for itself.

It is our duty to see that the means of to-day are sufficient for the things of to-day.

I propose to confine the scope of this discussion entirely to cities of not over 15,000 population, and to country schools.

For the preparation of teachers we are confined to: (1) colleges and universities; (2) normal schools; (3) high schools and their graduates; (4) county institutes.

It may be asserted in the beginning that, except only the question of moral training, all other questions sink into insignificance compared with this of supplying the schools in our smaller cities and towns, and in our country districts with competent teachers.

The establishment of professional schools of a high order, schools of pedagogy, is very desirable. Only through their instrumentality can we hope to formulate the principles upon which the science of teaching is yet to be built. In fostering a spirit of research and investigation, and in stimulating thought, these schools exert a healthy influence in controlling the educational drift of the times.

But this is a country of immense distances. The bright lights which shine along the Atlantic coast are hardly discernible beyond the Alleghanies. The influence which comes from such schools may eventually prove the leaven which is to pervade the whole mass, but in the meantime the children are eating unleavened bread.

The establishment of a chair of pedagogy in the college, which is deservedly looked upon with favor, is sometimes a help and sometimes a hind-

erance. It is a help when it is filled by a man who is the peer in intellectual ability and requirements of any man in the faculty; it is a hinderance when it is simply an annex intended to draw students, or is only an attachment to some other chair, to be filled with what spare moments can be given to it. Such chairs have proved a great help to the cause of education, and they exert a wide influence in many States. But in order that the chair of pedagogy may be a help the course must be made as thorough, as exacting, as exhaustive as any in the catalogue; it is a hinderance when the course comes to be looked upon as a by-way through which indolence and mediocrity may easily reach the *summum bonum* of the student's desire—a degree.

On the whole, the tendency to establish such chairs in our larger institutions is to be regarded as a subject for congratulation.

It has been suggested that institutions like Yale, Harvard, Columbia, Vassar or Wellesley, rich in their endowments, and strong in a history of which they are proud; or universities depending upon the State, should establish schools of pedagogy equal in standing with the law or the medical school or the school of art; yet there are numbers of the smaller colleges which cannot support an additional chair.

These fresh-water colleges, as some one has called them, have small endowments, inexpensive buildings, meagre libraries and inadequate apparatus. Their professors receive but little in the way of compensation, and their classes are small. And yet these same insignificant fresh-water colleges are giving tone and texture to the religious, political and educational character of that great section which is the very heart of the nation.

Shall we say to these graduates, as we infer from the tone of our educational journals that some are disposed to say, because they have had little or no professional training, because they have not read certain professional treatises, or have not studied the history of education along certain lines, that we have no place for them in our work? Possibly at the East the supply so far exceeds the demand that you can fill your schools with teachers who are adepts in psychology and skilled in pedagogy; but at the West we need these men and women and our wants are imperative and immediate.

We cannot always stop to put the raw recruit into the awkward squad to be drilled; we are compelled to put him into the ranks beside the trained veteran, and he has to learn the trade of the soldier in the face of the enemy. It sometimes happens that we have only five barley loaves and two small fishes, and there is an immense multitude to be fed. The miracle which the Master performed by the Sea of Tiberias has to be performed again and again in some sections of the country.

In every State are many small cities and villages in which the principal of the school teaches certain branches in the highest grade, but spends most of his time in supervising. For men and women to fill such places

we are forced to look to the graduates of our colleges. They must be persons of growing scholarship; they must be cultured in the sense in which culture means depth, not polish; solidity of foundation rather than beauty of exterior. They must have that power of concentration which comes from close application; that grasp of mind which enables the individual to so comprehend the thoughts and ideas of others as to make them available for his own purpose. In a word, the man who is to direct others in teaching must himself know by what process he acquires, retains, and reproduces knowledge. Practice gives a man skill in many things, the methods and reasons of which he fails clearly to understand.

I do not assert by any means that every college graduate is fitted to be a supervisor of city or village schools, nor do I assert that every successful superintendent is per force a college graduate; but I do assert, without hesitation, that the standard college is an excellent preparatory school for those who are to act as supervisors of a considerable number of teachers.

The man who is at the head of a system of schools in a city of 10,000 inhabitants ought to be able to form, control, and direct the educational influences of the people of that city. His very presence should be an inspiration not only to his pupils and teachers, but to every friend of the schools with whom he comes in contact. Strong in intellect, upright in character, thorough in scholarship,—his emotional nature well developed, the city superintendent has before him an almost unlimited field for usefulness. If I were looking for a man to place at the head of the schools of a city of 5,000 to 15,000 inhabitants, I would look for him among the graduates of some reputable college,—and by a reputable college I mean one in which graduation comes only at the end of four years of patient, intelligent, persistent study.

It cannot be disputed that, previous to the civil war, the schools of New England were largely indebted to the students from the colleges, who were accustomed to teach in them during the winter months. There is sex in mind as there is sex in nature. The masculine and the feminine minds are complements each of the other. This annual infusion of the masculine mind, together with the fact that these students were accustomed to self-exertion and self-activity, aided in giving manly vigor and intellectual strength to the entire community. Brawny, brainy men, their work was seen in the pre-eminence which New England held so long in the councils of the nation. We need this stimulating, vivifying, impregnating influence in our schools to-day; and I know not where to find it unless by encouraging the graduates of our colleges to enter the profession of teaching. Shall we take them without any special training? Yes, if we can get them in no other way. Until there is a marked change in the wants of our schools, I, for one, will never be guilty of putting up a pedagogical bar for the purpose of keeping them out.

Shall we say that special preparation for the teacher's work is not desir-

able? Certainly it is very desirable, but it is not indispensable. There are only four indispensable requisites,—knowledge of subject-matter, uprightness of character, a desire to improve, and common sense. With these as a foundation we may build an Arnold, an Agassiz, or a Philbrick. If any one of these requisites is wanting, no amount of professional study or reading of educational books can supply the deficiency. There has broken out lately a mania for high intellectual development, which the teacher expects to attain by reading a book a month. Teachers sometimes become gormandizers of books. Dickens says of one of his schoolmaster characters, after enumerating a long list of his requirements: "Ah, rather overdone, Mr. Choakumchild. If he had only learnt a little less, how infinitely better he might have taught much more!"

However, if these graduates come into our schools, we ought to open to them every possible avenue of growth. If the State board of education, in a State where such a board exists, or the State board of examiners, where there is such a body, or even the associated colleges of the State, would mark out a course of reading and study, covering not less than two years, and at the end of the time would give to those who had carefully read it, and could prove their success in their work, a testimonial of some kind, not a degree, which would entitle the holder to a professional standing among the teachers of the State, it would be a practical step of great value. Such a course should be limited and carefully chosen. It should embrace less of the science and more of the art of education, if these can be separated. It should treat largely of school economy; the construction of school buildings; scientific methods of lighting, heating, and ventilating the rooms. School hygiene and sanitation should be made especially strong. In many instances new buildings are defective in most vital respects, not because the school directors are miserly or even indifferent, but because to the stupidity of the architect is added the ignorance of the schoolmaster, upon whose supposed wisdom the authorities depend. Such a course should concern itself very largely with facts connected with the immediate wants of the school.

The men and women who are to act as supervisors in the class of cities of which I am speaking need two qualifications: (1) To know the branches taught in the schools; (2) To know those related things which closely concern the welfare and comfort, as well as the growth, of teachers and pupils under their care. If they have these essentials, we can trust them for what lies beyond.

When we attempt to push our inquiries so as to consider the available means for procuring suitable teachers for high schools, the problem becomes complicated by some unfortunate conditions. Chief among these is the large number of branches in which a teacher is expected to instruct. In many cases no attempt is made to even group cognate branches. In a list of high schools before me, one teacher is expected to instruct in

geometry, civil government, political economy, physics, language, and arithmetic; another in mathematics, English literature, history, rhetoric, and physical geography; yet another in English grammar, political economy, astronomy, and the sciences.

It is not unusual to find a high school course requiring instruction in five, and in some cases seven, different sciences. I do not know of any available means of providing competent teachers for these schools as long as every man's hobby must find a place in the curriculum, and fourteen weeks is considered ample time to perfect the pupils in any one of the sciences.

There are four propositions worthy of consideration:

1. Pedagogical research, educational inquiry, the study of methodology alone, can never constitute a man a teacher. The machine which makes the teacher a mere automaton is already producing alarming results in this direction. In many of our schools we are approaching the danger-line of killing off individuality, of crushing out spontaniety, of dwarfing the teaching ingenuity, by reducing everything to the dead level of certain so-called philosophical methods. We are training the teachers to follow the ruts.

2. There is a failure with teachers, if I may use the expression, to distinguish between an individual method and a representative method; between an arrangement which is the invention of the person using it, partaking largely of the nature of a device, and a method which is typical in its nature,—which exemplifies the essential characteristics of all related methods. A device is the creation of the teacher,—a method is based upon eternal truths.

Our schools of methods are very often only schools of devices.

3. The school which gives its students power of thought, clearness of expression, aptness of illustration, and a desire to grow, is a good fitting school for its teachers,—what branches are taught there is of secondary importance.

4. To build a wall of partition in the normal school, or in the college, and say that the studies on this side are purely academic, and those on that side purely professional, is the concentration of stupidity. The most successful normal school is that which most closely combines in its daily work educational thought and educational practice. The attempt to separate them combines the worst elements of a blunder and a crime.

It is a fact that the colleges and normal schools do not realize that it is their province to prepare teachers for high school work. When they reach this point certain results will follow. They will no longer attempt to prepare teachers for their work by reading and studying a few books during the last half of the course. The science and art of education will be taught during every exercise. There will be no less academic work, but it will be of a very different kind. Each lesson will be taught as

based upon educational principles; the student will be required to study it with two ends in view,—as he would teach his pupils to study it, and as he himself should study it if he were to teach it. Arithmetic or geography should be just as much a professional study in the normal school as psychology or the history of education. Every exercise should have a school-room side. A teacher said the other day, "I did not stay at the normal long enough to do me much good. I was there only a year."

Such a case argues a deficiency of brains somewhere, either on the part of the teacher or on the part of the instructors in the normal school. The academic and the professional should assume their rightful relations, one being necessary to complete the other. As it is, the academic seems to the ordinary student to be separated from the professional by a gulf almost as unfathomable as that which separated the rich man from the beggar in Abraham's bosom.

Such a condition of affairs surrounds the institution with a devitalizing atmosphere which is the sure precursor of death to the teaching spirit. The colleges and the normal schools complain that high schools send them students poorly fitted for advanced work. Did it ever occur to them that such students are the legitimate result of employing the graduates of these very schools as instructors?

The normal school which makes excellency of scholarship a subordinate aim, makes a very grave mistake. On the other hand, the instructor whose only aim is to induce excellency of scholarship, has no place whatever in a normal school faculty. When these things are understood and practiced there will be a stronger incentive for students to remain and finish their course. In proportion as they have been brought into contact with the living teacher, as knowledge has become growth, as instruction has engendered inspiration, they will sooner come into close sympathy with their work,—they will enter more heartily into the spirit of the school, and will exert in a little time a wonderful formative power over the plastic minds of their pupils.

In supplying teachers for our primary and grammar school grades, our high schools ought to be more available than they are. It is true that in many places young ladies are induced to remain and graduate in the high school, with the hope of thus securing a position as teacher at home. It sometimes happens that four-fifths of the teachers in a small city are of home manufacture. Such a course frequently, not always, brings about a reign of undiluted imbecility in the schools; yet so strong are the political and religious environments that it is almost impossible to prescribe any adequate remedy. It is one of the weak points in our school system.

The course of study, as usually administered in the high school, does not fit pupils to become competent teachers. Both the manner of study and the manner of reciting are faulty. Pupils study to recite; they recite

and—forget. Perhaps it may be true of other grades, as well as of the high school, that, in the finer sense of the words, there is in our school work too much education and too little instruction; too much of an effort to lead out, and not enough to build in. We endeavor to compel developments. As some one has expressed it, the children are forced to climb so fast that they have no time to grow. We can give the plant soil and heat, sunlight and moisture, but the manner of its growth is a mystery not given man to solve.

The effect of this is felt when the pupils come to the teacher's estate. We do not begin the work of preparing them to be teachers soon enough; it should commence in the primary room, and continue through each grade.

Occasionally we find a high school which is renowned in all the surrounding country for sending out successful teachers. In such a school, if we investigate, we always find certain conditions:

1. Pupils are taught how to study with a view of getting the most out of a subject, not simply out of the book. They practice vivisection on every subject they take up.

2. They are taught to exhaust the means at their command. If it is only a dictionary, an encyclopædia, a few reference books at home or at school, they make the best use possible of them. Superabundance of means is sometimes a source of waste to the student.

3. The pupils are expected to ask questions as well as answer them, and the teachers are expected to answer questions as well as ask them. The independence, which the pupil thus gains, goes with him into his school, and serves him well in the absence of strictly professional training. It enables him to solve, without the aid of a key, the innumerable problems which present themselves almost daily in the school-room.

Enthusiasm is the life of good school work. Thus the pupils during four years acquire so great devotion to their work, they become so aglow with the delight of acquiring and imparting knowledge that it becomes an appetite, as it were, and they are not happy except when under its influence.

There is not much dependence to be placed upon a normal course connected with the high school, unless it can be maintained entirely separate from other courses. Ordinarily it differs from them in no particular except that, during the last year of the course, the class read certain books, which are supposed in some mysterious way to impart to the learner the art of teaching.

A better plan in a city of ten thousand people is to gather the graduates of the high school, who are to teach in the city schools, into a building of four rooms. Put them into active work, but place over them an experienced teacher, one whose entire time is taken up in the supervision of the building. Make this training to consist mainly in acquiring the minutiæ of school management, at the same time selecting a few books to be read

and analyzed, under the care of the principal of the building. In order to induce the best material to enter the school, pay these teachers a small amount from the beginning, increasing it slightly every three months, as success warrants it. At the end of each year there will be a sufficient supply of fairly competent material to fill most vacancies, excepting always a few important rooms, which must be filled by more experienced teachers. This does not form an ideal training school, but I know of no better, or more practical way of utilizing the products of the high school in a small city.

The attempt of normal schools to raise the standard, as they term it, is in itself commendable from one standpoint; but when the growth, instead of reaching out in all directions, is in one only; where breadth is sacrificed to attain height, the wisdom of the step is at best very questionable. I desire not to be misunderstood. The best preparation possible under the circumstances should be demanded of those desiring admission, but every school must be governed by its own environment.

There are two ways that suggest themselves, by which we may increase the efficiency of a normal school. We may raise the entrance standard and increase the requirements for graduation, or we may illiminate from time to time all incompetent material, by saying to those who give no evidence of any teaching ability that they must for their own interests, as well as for the interests of the schools, seek some other avocation. This latter course would certainly tend to disabuse the public of the idea that anybody can be manufactured into a teacher.

In one respect the standard cannot be too high. Whatever the applicant knows he should know thoroughly. Let him come with a thorough knowledge of a few things rather than with a superficial knowledge of a multitude of things. The trouble with those who seek admission to the normal school is not that they know so little, but that they claim to know so much.

This we ought never for an instant to forget: That the sole purpose for which the normal school was founded and is maintained is the preparation of teachers for the common schools of the State.

If we need competent teachers anywhere, we need them in the grades and schools in which four-fifths of the pupils are educated.

It is possible for the normal schools to offer the graduates of our high schools, and the best teachers in our country schools, a two years' course,—not an attachment to some other course, but complete in itself. Such a course should comprise:

1. A thorough review of the common English branches, from the teaching point of view. Some one has objected that knowing a subject does not always enable one to teach it. Very true, but it is a long stride in that direction. A prolific source of incompetent teachers is not the inability to communicate knowledge but the absolute ignorance of the subject-matter beyond what is contained in the text-book found in the hands of

both pupils and teacher, and sometimes there is manifest ignorance even of that.

2. Illustrative teaching setting forth the best methods, and giving the students practice in the same. I do not mean wholly the study of methods as laid down in some text-book, but the daily exemplification of such methods as experience has demonstrated are most suitable for use in the common school.

3. A limited course of reading in history and literature, designed to teach the use of books, as available for purposes of investigation and research. A small library even will open to them an immense field.

4. So much of school law as bears directly upon the duties of teachers, their powers and their rights; school hygiene and sanitation; and some acquaintance with the first principles, the practical truths of psychology, measuring the instruction very largely by the comprehension of the individual members of the class.

Three things should be said here regarding this elementary preparation of teachers for their work:

1. Teachers should be carefully trained to know and regard the laws which pertain to sound physical health. The body of the child is of as much consequence to him as his mind, and the teacher has no more right to trifle with the one than he has with the other.

2. The individual peculiarities of each child, his wants and his capacities, demand of the teacher close thought and observation. This is justice; to fail or neglect to do it, is injustice. This, too, must be part of the teacher's training.

3. In order that the instruction and discipline may, as far as possible, counteract the influences that are fast warping the life of the child out of all comeliness and symmetry, attention to the environment and home-life of the pupils cannot safely be neglected. These things should be emphasized in training teachers, even if we are forced to neglect other things of more ambitious names.

Part of the aim of illustrative teaching should be to enable those who are to teach in village and country schools to construct forms, solids, maps, charts, and simple apparatus at very little expense. I say it with reverence akin to awe, as one who may be charged with trifling with sacred things, that no reading of psychology, no depths of pedagogical lore, no study of educational history, no knowledge of methods learned from books, can compensate for a lack of that power which enables the village schoolmistress to stand, crayon in hand, before the blackboard and illustrate the lesson, or to construct her apparatus or appliances from the cheap articles she can obtain at the country store, or to use the things of common life to make clear the truths of nature to the minds of her wondering pupils.

Dr. Klemm, in his "European Schools," speaks of finding village schools well supplied with home-made apparatus, and he contrasts it with the in-

describable poverty found in the schools in this country, in son not even a blackboard is provided. I would not willingly be g offense of precipitating a discussion upon manual training ; but if the preparation of the teacher included a knowledge of few tools, a skilled hand, and a trained eye, he would not helpless in the absence of some simple appliance, or a piece needed in his class work for purposes of instruction or illust

This skill in handicraft his course in the normal school him. There are schools which do this, but you can look t of catalogues and not find one which gives prominence teachers in the use of material.

I am not speaking of any one State but of a nation of f in many of which the need of this elementary training is the means for supplying it are very inadequate.

This brings us to the consideration of a most impor preparation of teachers, the place of the normal institu quite one-third of our teachers in the country schools h one year's experience. Many of them are young,—not o of age,—with immature minds, and with moderate schol These things ought not to be,—I grant it.

It is very easy to say that no one should be allowed as a teacher who is not the graduate of a normal scho alent institution. It looks well in print, it sounds w educational meeting, but to my knowledge there is Union ready for such a law. What ought to be is d of what is.

We hope for better schools in the future, but th boy now, who is suffering to-day from incompetent house is full of golden grain, but while we are hun the multitude about us are perishing for lack of su

The mission of the normal institute is largely wi It furnishes an excellent means of reaching the i who needs not only instruction, but the inspiring from close contact with other minds. Isolation m

The first desideratum is to bring the institu teacher's means. Two hundred and fifty dollar average female teacher receives during the year many States. One hundred dollars additional w earn in most village schools. Out of this she her clothing, and meet incidental expenses. T and professional instruction is not an extrav urging these girls to buy professional books, and to join reading circles, let us be just as ment cannot exceed in size the cloth out of w

of two weeks in length, if time is rigidly economized, can be made to prove of great benefit to them, sending them home with note-books filled with useful hints, and with inspiration enough to last them a year.

There are three points to be considered in the institute question :

1. The organization. The institute should be at the end of the year's work, not at the beginning. It should be the culmination of so many months' study and preparation. There should be a regular succession of steps or grades, each one of which means a perceptible advance. At the close of the institute each teacher should know in what class he belongs. He should be furnished with a syllabus as a guide, in order that he may more intelligently prepare for the institute of the succeeding year. There should be a carefully prepared course of study arranged with the design of preventing scattering on the part of the instructors. Branches which are of immediate importance should have the greater prominence. Nowhere should it be indicated in the outlines of the course that the institute is for any other purpose than to enable the teacher to do better and more satisfactory work. No one should be admitted as a member who does not expect to teach in the public schools. With the adoption of suitable regulations and requirements I can see no reason why, after three or four years the teacher may not be excused from further attendance. Under such a system the institute will be something more than an educational spasm, recurring annually, but leaving no permanent effects.

2. The second point concerns the instructors. Some of the poorest work I have ever seen done in an institute has been at the hands of men who are adepts in knowledge, but who are entirely ignorant of the wants of the teachers ; and some of the best work has been done by instructors of somewhat limited knowledge, but who from personal acquaintance with the condition of the schools are able to bring themselves and the class into the closest sympathy. The instructor should be one who from the depths of his own experience can bring forth things worth giving and worth taking. The test of a competent institute instructor is the consciousness that he himself grows with every effort he puts forth to induce growth in others.

The choice of instructors should be left to local authorities. Their scholarship and fitness for the position should be passed upon by competent authority before they are allowed to enter upon their work. Their special fitness should consist in a knowledge of the branches which they are to teach ; in an acquaintance with modern methods, and the best educational thought, and in an ability to awaken a lasting enthusiasm in actual school work.

It is the easiest thing possible to create an enthusiasm in the latest educational craze, but it is much more difficult to awaken enthusiasm in teaching boys and girls to read, write, and cipher, and that is what they go to school for very largely.

3. The third point is the character of the instruction. Formerly I was wont to complain that there is too much academic work done in the institute. Closer relations to them convinces me that I am mistaken. It is not the amount of academic work of which I now complain but the kind. I am no longer concerned about the quantity but the quality.

I listened one day last summer to a recitation in history in a normal institute. At the close of the hour, when the class was dismissed, I asked myself what single thought, or idea, or notion of any kind, have these teachers carried away which will be of use to them in their schools? And echo answered, what? In an institute, which is normal in any sense, every academic exercise should have a professional bearing, and every professional branch should be taught as illustrating the best class-room methods.

I am a firm believer in the institute, but it needs a thorough rejuvenation. Some old things should be brought back; some new ones should be cast out. The instruction should not be negative, but positive. A young lady went home from the county institute. Some one asked her, "What have you learned at the institute?" "I don't know," she answered, with a plaintive sigh. "I suppose everything I am doing in my school is wrong. I do wish some one would tell me what is right."

What do we profit the teacher if we banish ignorance and introduce chaos? The power of the institute would be greatly increased if the instruction could be kept within the possible comprehension of the teachers.

I once heard a lecturer before a large institute say to his audience: "You in your school-rooms ought to make the mind of the child in its every-day dress your constant study. You have there an opportunity of which the philosopher in his thoughtful moods would gladly avail himself." Afterwards I thought the matter over. "That lecturer actually advised those boys and girls, with callous, undisciplined minds, many of them holding only a second-grade certificate,—and that by the grace of the examiner,—to do that which wise, studious men have attempted for years with only partial success. I think I know country school teachers who could make a more sensible talk than that was." I dismissed the subject, but more mature reflection has convinced me that my conclusions were correct. *I was the lecturer.*

The greatest work which Horace Mann did for Massachusetts,—greatest because most lasting,—was in going before the teachers and people of the State at their educational gatherings, and talking to them in plain, unmistakable language concerning the privileges of parents, the duties of teachers, and the welfare of the schools. There was no display of rhetoric, no attempt to philosophize, no reference to schools of thought long since dead and forgotten. His very illustrations were of that strong, homely, rugged kind which reach the hearts and consciences of common people, and leave impressions as enduring as life itself. As, when con-

templating the character and work of the teacher, he burst out: "What supreme folly to employ bats and moles to teach young eagles to fly!"

The best work done in our institutes to-day is that which instructs both the public and the teacher, which declares the school to be the common property of every citizen of the State; which touches upon the school-house and its surroundings as regarding health, comfort, and even decency, upon co-operation on the part of parents, and regularity and punctuality on the part of pupils; which considers school government and school discipline; which treats of the recitation, of the art of questioning, of study, of recreation; which dwells upon the moral and physical fitness of the teacher even more than the intellectual; which avails itself of the tenderness of Pestalozzi and the wisdom of Froebel, to set forth the office of the teacher and the worth of the child.

This seems to be only plain, old-fashioned talk, but it is the kind which is needed by our country school teachers, and possibly some of our city teachers would be profited by it. I may be rated a heretic; but I honestly believe that very many of our teachers are wasting their efforts and failing to do their best work, because they are neglecting to regard the things which pertain to the present wants of their schools, in their desire to attain an undefined, intangible, impalpable something,—of the nature and use of which they have no definite idea. I wish we had more institute instructors whose instruction is luminous with the light of common things.

After all, I confess that at times I am out of patience, disgusted with very much that is said and written and done concerning the preparatory work demanded of teachers. It is too lofty, too top-heavy,—it lies way upon the upper shelves where teachers of ordinary stature cannot reach it.

The things which are most trite and yet most practical, which commend themselves to the good sense of the people; the things in which our schools are most wanting, and yet which will be of the greatest help to the child in life, of these things we are gradually losing sight in our efforts to elevate the profession.

If we would throttle crime in its dens, we must make our moral training more effective,—in the kindergarten, in the primary grades, in the district school,—wherever we can reach the mind of the child in its formative state. If we expect to give the child the power to earn an earnest living, we must put him in possession of the multiplication table; if we would enable him as a citizen to vote intelligently, we must teach the boy the principles of republican government. If we are to reform politics, we must make the primer and the spelling-book a power behind the political throne.

Our present means for preparing teachers must be made available for these things.

President Eliot has lately said that "the quality and sufficiency of popular education are dependent upon influences which proceed from higher

institutions of learning." I do not believe that is sound doctrine. It furnishes no ground upon which we may safely rest. I do not underestimate the influence of these institutions upon the popular mind, but they have no such prevailing power as he claims for them.

We cannot thus shake off the duty of the hour. Way down at the foundations where the air is resonant with the sound of the ax, the anvil, and the loom; in the counting-room where business sits enthroned as the deity; amid the dust and sweat of daily toil; wherever men are engaged in a hand-to-hand struggle for bread, is a substratum of society which these influences can never reach. The influences which come from our higher institutions of learning are not sufficient to save this nation from its peril.

The common school is a more powerful factor than the university. Here in the schools in which the children of the farmer, the mechanic, the laborer, the miner, receive their scanty education, we must contrive in some way to place the distinctively, competent American teacher.

DISCUSSION.

[Reported by Supt. W. E. Anderson, Milwaukee, Wis.]

Supt. Wm. H. Beach, Madison, Wis.: The purpose of this discussion is presumed to be to learn the condition in the different States of the means for the equipment of teachers for their work. The pioneers of Wisconsin had in view the importance of the general education of the people, and they made wise provision for this object. The State is well provided with means for the training of teachers. There are in the State five normal schools, located at Platteville, Oshkosh, Whitewater, River Falls, and Milwaukee. These are in buildings commodious and convenient, well furnished with all needful appliances, with ample funds, and with able corps of instructors. The attendance at these schools is large, often beyond the ordinary seating capacity of the buildings, and additions have frequently been necessary. The work done is academic as well as normal. The department of pedagogy in the State University is ably conducted, and its value and efficiency are becoming more and more appreciated. Teachers' institutes, from two days to a week in length, are held in every county in the State. These are conducted by professors in the normal schools assisted by other competent instructors. Lectures on educational reformers and kindred practical topics are a feature of these institutes.

Every free high school in the State, and there are 172 of them, is required by law to include in its course of study instruction in the theory and practice of teaching. It has seemed to be the best way to carry out

this requirement of the law to make the highest class in the school a normal class and to review the elementary branches with a free discussion of the best way of teaching it.

There is in connection with the State University a summer school for advanced teachers. The Legislature has made liberal appropriations for the maintenance of this school. A small tuition fee is also charged. Specialists are employed to teach the most important subjects. The school has been largely attended, and its great value is recognized. There have been held in various parts of the State sixteen other summer schools for the training of teachers in the more elementary branches, and these have been well attended.

In many cities and counties teachers have established libraries of the most valuable books on educational subjects, and the leading educational periodicals. There is a State association of teachers holding its annual meeting in the winter, and there are four sectional associations holding their annual meetings in the summer. So the State is reasonably well supplied with means for preparing teachers and encouraging them in their work.

It sometimes happens that the abundance of means and resources leads to a want of appreciation of them, and possibly many attend normal schools with the idea that the principal thing is to acquire a knowledge of the methods and ways that are taught in these training schools. The methods externally acquired are not of themselves sufficient. Natural tact and the genuine spirit of the teacher are the most essential things after all. Close self-examination and rigid self-discipline are necessary before one enters on the work of teaching. It is well that those who are passing through our higher institutions of learning, preparing themselves for a professional or business career, should come into contact with others pursuing like courses, and measure themselves with them. But the source of inspiration is within, and it behooves every one to study himself and take his own measure, carefully to learn his own capabilities and his calling honestly and uninfluenced by motives of expediency. Those at the head of our schools may well encourage their students to choose this as that calling. And they would be doing an infinite service to our schools if they would discourage those not adapted to the work of teaching, from choosing that profession.

A few years since application was made to the president of one of the best normal schools in the Northwest for a teacher to fill the position of assistant in a high school. He replied that in his entire graduating class of fifteen or more there was only one whom he could conscientiously recommend as a teacher, and even that one he could not recommend unqualifiedly. And yet the class had completed the entire course of academic and professional training. But the professional training without some natural ability would not make them teachers.

We all recognize the value of professional training, and realize that it is

poor economy for one to acquire the art of teaching slowly and at the expense of the best interests of the school he is endeavoring to conduct. It is also detrimental to the schools that they should be managed by those whose equipments are merely external, formal and mechanical, where natural tact and the true spirit of the teacher are wanting. One having the genuine impulse for teaching, preparing himself by every available means, under difficulties perhaps, will exercise a vitalizing power and influence, that another, though equipped with all the modern, improved methods, will never have. We may all have known teachers unacquainted with educational reformers, who have made use of many of the very things the reformers taught, because they themselves were endowed with the native faculty to see that these were the right things to do. An intuition into the workings of the minds of children, and a sense of responsibility, will make such an one a teacher. Such an one has already a certificate to teach. Let us acquire all the professional training possible, but let us see to it first that we have the right material to begin with.

SUPT. A. P. MARBLE, Worcester, Mass.: The available means for the preparation of teachers for their work vary with the locality. What is on the whole best on the fertile prairies of Iowa may not be best adapted to the rocky hill-sides of Massachusetts, nor to the conditions of a great metropolis. In educational discussions we often fail to take into account the conditions of the problem. The teacher in a rural district, where school is recreation, and pupils attend school only a few months in the year, has different material to work on from what is found in city schools; and the preparation for this work is in some respects different from that of a city teacher. Whatever professional training the country teacher may have,—and the more the better,—without a certain executive faculty, which has been denominated "the ability to run a hotel," there will be failure. This faculty is not less useful, though it may not be so indispensable, in a graded or city school; the lack of it in a marked degree may not be so fatal to all success as it is in the country school, because the system, the organization, the help of the principal, and, in extreme cases, of the superintendent or the truant officer, will be an aid. Moreover, in the graded school, with a single class, one method of discipline and instruction is applicable to all pupils. In a mixed school, on the other hand, with pupils of widely varying ages, as well as with the diverse capacities of individuals incident to all schools, the executive faculty, as respects both the teaching and the discipline, becomes more important.

But there is a common preparation needful for all teachers. The indispensable condition for all good teaching is scholarship. The young cannot be well trained by an untaught teacher. It is not merely the prescribed curriculum that the pupil must be made acquainted with. This is the framework, so to speak, the skeleton, upon which must grow the parts

that make up a symmetrical whole ; and this symmetry is produced out of the well-stored mind of an educated teacher. The daily lessons must be enlivened and vivified by related facts and suggested ideas. This can be best done from the storehouse of a mind running over with knowledge, broad and deep, encompassing the subject-matter of the daily tasks.

To such broad culture the teacher should, if possible, by all means add an acquaintance with the science and the art of teaching. But valuable as this professional training is, it can never take the place of the indispensable qualification just named.

MR. MARBLE then described at some length the apprentice system, so-called, in use in one of the Massachusetts State normal schools,—that at Worcester. This takes the place of the school of observation, and is superior to it because the pupil-teacher deals with a real school, and not with a class or classes of pupils practiced upon till they know what to expect from every fresh arrival of normal school pupils. The apprentice spends six months in the schools of the city, generally not more than two. In every way she makes herself useful, and she keeps out of the way ; she observes, she helps, she reports what she sees,—and she is reported on. Thus her theory of teaching is corrected by practice. It becomes practical and not mere theory. Her errors in observation and in practice are corrected, both by the normal school teachers and by the teachers with whom she works. She takes a class occasionally, and sometimes she is put in charge of the school. In this way she learns more about teaching in six months than she would learn in two years without this help, and with the care and responsibility of a school.

If it is objected that in this way the young teacher copies the errors of the teachers with whom she works, on the other hand she copies the excellencies also,—and it is better to copy something fairly good at first than to do poorly. Later, there is always opportunity to improve upon the copy,—just as in writing. One of the excellencies in the school referred to is the attention given to the midday lunch. This is made a lesson in hygiene,—it has become almost a fine art. There is provided a warm closet, tables, and simple table furniture, and all the pupils sit together and take their food in a cheerful atmosphere. This influence upon the future teacher is far-reaching, much more than at first appears.

But better even than mere learning and professional skill is a sincere love for children, and an earnest desire to lift them up. The teacher, filled with love for the little ones, will find a way to help them and improve them, far more than one filled with all knowledge and stuffed to repletion with methods, psychology, and the science of pedagogy, if in attaining all this the juice of human kindness has been squeezed out of her. Children must not be looked upon as specimens upon which to practice the arts of the profession. They are human souls to be developed and made manly and womanly.

SUPT. J. M. GREENWOOD, Kansas City, Mo.: School boards do not make the schools, but the teacher in the school-room is the school. The child in the school-room is the object of the school. It might be as well to state clearly that all this talk about making good teachers without professional training is of little value to the schools. There is no equivalent for professional training. The time is coming when none but those professionally trained will be employed to teach in the public schools. Let us understand it, and not beguile ourselves into long-winded discussions in the vain search for temporary substitutes.

MR. BARRINGER, Newark, N. J.: I think we are all agreed that our teachers should be well qualified to enter upon the work of instruction. The great question is, "How shall this supply of good teachers be multiplied?" In my own experiments I usually ask the teachers who come to my school, "What are you here for?" It reminds them of their great mission. One of the best things to set a teacher right in the work of the common schools is an earnest consideration of such a question. What is the trouble with the normal school work? It is the low tone of scholarship. What is the reason of this low tone? It is because of the concern of local managers to accommodate those pupils who apply. A great many graduates of country schools will not go into normal schools where they must pursue the same course of study again. We cannot expect all the teachers of a State to come from a normal school. It cannot be done. In our State there are training classes that do very much of this work. We need more normal schools of a higher grade, better equipped, better taught, longer course, with plenty of observation, practice, and criticism. There is too much anxiety to complete the normal course in a short time. Good qualifications for admission, from two to three years' thorough training under able and experienced teachers, and the schools of the country would soon feel the beneficial effects of normal training.

H. C. MISSIMER, Erie, Penn.: Most school boards are indifferent on the subject, and leave the entire responsibility of ways and means to the superintendent.

A special training teacher may be desirable to give unity to the work of preparing our teachers, but a *special* teacher is not really necessary. The means of preparing teachers for their work are at hand in every school district, because in every district there are teachers of special skill in teaching one subject or another. Out of these teachers an excellent training faculty can be organized.

A general knowledge of the branches to be taught is, of course, the thing that candidates for teaching must have as a basis to start with. The question of the best methods of teaching these branches, of managing the school, and developing character, should constitute the main work of the training class. Call in the teacher who has been most successful

in teaching reading. Let her give a dozen lessons, or two dozen lessons, or as many lessons as may be necessary in setting forth fully, in detail, with every simple illustration she herself uses, *her* way of beginning the little ones in their very first lesson. What does she do first, and how? What does she do next, and how? And so on from day to day.

Call in the teacher who has been successful in number work, or in the first steps of arithmetic. Let her do the same as the teacher of reading. Call in your best teacher of geography, your best teacher of grammar, United States history, writing, drawing, and music. Let the young candidates be taught how to put lessons on the board properly and neatly. Apportion them among the schools to some particular room for half-day observations, for a month, with daily report of what they have seen. Let them teach for another month, one class a day, under the direction of the skilled teacher in charge of the room, and practical results are sure to follow by the end of the year.

How about psychology, the history of education and the special study of methods? Would you not have our candidates instructed in the science of teaching and the history of education? No—and yes. No for all and every, until they have had at least two or three years' practice in teaching, and then yes, by all means. Why, in the first instance, no? First, because the young girls that go into our training classes fresh from the high school are too immature to understand mental philosophy or psychology. It will only befuddle them. The power to analyze, to dissect, to connect mental processes in their proper relations, is the last and highest achievement of the intellect. It is the result of much observation and wide experience. For a young girl to psychologize, to philosophize about the mental process of the child-mind, without knowing anything about children, or coming into actual mental contact with them is, if not the purest nonsense, at least of extremely doubtful value.

Again, the *abstract* study of psychology, as a preparation for teaching, is very apt to send the young teacher into the school with a tendency to impose and practice upon the children a theory instead of a disposition to study actual conditions out of which she ought to develop her *own* theories and her own methods.

Even the discussion of methods, before we are engaged in teaching, is of little value beyond conveying an idea of the nature of the work. The method of somebody else is of no value to me unless it quickens and expands ideas already existing in my own mind.

The best psychology for the teacher,—the beginning teacher,—is the psychology of vulgar practice. It is the right kind of psychology to rid our minds of foolish, impracticable, and short-sighted notions. It is the psychology that shows us where we shall probably fail, and where to concentrate our energies in order to succeed. *Professional* psychology should come after the teaching is begun, after common sense study of the chil-

dren, after the study of actual conditions. Then it will develop, enlarge, and widen the teaching mind.

STATE SUPT. DRAPER, New York, said: He was afraid we were not holding to the question. It was concerning present agencies for the professional training of teachers, not in the cities but in villages and the rural districts. He was sorry to note a disposition on the part of one or two speakers to disparage professional training altogether. It was too late in the history of educational progress to do this. Such sentiments are outlawed,—are back numbers. It was not worth while to argue with men who had been enjoying a Rip Van Winkle slumber, and were out of touch with the general educational sentiment of the country.

We cannot expect that all teachers will be as thoroughly prepared for their work as they may be and ought to be in the cities. Yet experience shows that some special preparation may be exacted even in the country. Candidates will comply with what is required. Send all you can to the regularly established normal schools, but remember that there can never be enough normal schools maintained to supply all the teachers needed in the common schools, and also that all candidates cannot afford to take a complete normal course for the sake of the mere chance of being employed at five or six dollars per week, with the likelihood of being turned out at the next turn of the political wheel. We need short-term training classes throughout the rural districts. Enough of these may be established in many States, at small cost, to supply all teachers needed. Where this cannot be done, institute pass examinations. We have turned back six thousand candidates in each of the last three years in the rural districts of the State of New York in this way.

THE CHAIRMAN: Suppose you had a whole Congressional district in which you were short of teachers to supply the schools? What would you do?

SUPT. DRAPER: I would import them from districts having a surplus. We have large sections of country in which the circumstances are as hard as can be in the thrifty and magnificent State of Iowa. When they are short of teachers, we tell them to send to one of the normal schools or to a commissioner in another county, and the result is that some deserving one, who has gone to the trouble and expense in preparing to teach, gets the place. Take this course and you will not only set all hands at work, but you will direct their labor. You will fill up the normal schools and training classes, and stimulate educational activity in more ways than can be specified.

It is quite the fashion to discredit examinations. It is a foolish habit. The examination has its legitimate use. We do not use it to determine who *shall* be certified but who shall not be. We do not say that all who

pass an examination shall be certified by any means. We say that the local officer may withhold certificates from any candidate, no matter whether he passes the examination or not, and without giving any reason. We only say that he shall not issue a certificate unless the candidate attends upon a prescribed course of professional instruction or passes the prescribed examination. In the next world we may be able to accomplish ends without means, but we cannot in this world.

Something has been said about institutes. We would talk more understandingly if we first defined the term. Our institutes are agencies for keeping teachers abreast of the times. That is about all that can be expected of a meeting which continues only a week or two. Such a meeting will go far to do that, if it is properly organized and managed. But it must be a school,—not a picnic. All must attend and attend regularly. This cannot be expected unless attendance is both compulsory and compensated. The work done must be substantial and inviting and progressive.

We will continue to talk about innumerable things, but nothing can be of such supreme importance as the institution of efficient agencies for promoting the professional training of teachers and for preventing the certification of such as are not so trained.

PROCEEDINGS

OF THE

'ARTMENT OF SUPERINTENDENCE

OF THE

]ational Educational Association

AT ITS

MEETING IN BROOKLYN, N. Y.

FEBRUARY 16, 17, 18, 1892

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DEPARTMENT OF SUPERINTENDENCE.

SECRETARY'S MINUTES.

FIRST DAY.—MORNING SESSION.

TUESDAY, *February* 16, 1892.

THE Department of Superintendence of the National Educational Association met in the rooms of the Brooklyn Art Association, Brooklyn, N. Y., on Tuesday morning, February 16, 1892. The President of the Department, Hon. Henry Sabin, of Iowa, called the meeting to order at 10 o'clock.

Prayer was offered by the Rev. Dr. R. S. Storrs, of the Church of the Pilgrims, Brooklyn, N. Y.

Mayor Boody, in behalf of the people of Brooklyn, extended a cordial greeting to the Department, tendering the hospitality of the city.

President Joseph C. Hendricks, of the Brooklyn Board of Education, speaking in behalf of that body and of the City Public Schools, extended a generous welcome to the members of the Department.

To these very neat addresses the President of the Department made suitable response.

On motion of Mr. W. E. Sheldon, of Boston, the President was authorized to appoint the usual standing committees.

Superintendent Edwin P. Seaver, of Boston, extended a most earnest invitation to the Department to meet next year in the city of Boston, submitting the following action of the Board of Education of that city:—

Boston, Mass., *February* 9, 1892.

On motion of Mr. Capen, the Superintendent of Schools was authorized to invite the National Association of School Superintendents to hold their next annual convention in Boston, and to extend to them the usual hospitalities.

ATTEST: PHINEAS BATES, *Secretary.*

Action deferred until the afternoon session of Wednesday.

Hon. Henry Raab, State Superintendent of Illinois, was introduced. He read a paper on the Rural School Problem.

Superintendent J. A. Shawan, of Columbus, Ohio, was appointed to report the discussions on this paper.

Superintendent Raab's paper was discussed by Hon. O. E. Wells, State Superintendent of Wisconsin; Mr. John MacDonald, editor of the *Western School Journal*, Topeka, Kansas; Hon. E. B. Prettyman, State Superintendent of Maryland; C. C. Rounds, Principal of Plymouth Normal School, Plymouth, N. H.; Judge Andrew S. Draper, State Superintendent of New York; Hon. Geo. H. Martin, Agent Massachusetts State Board of Education; L. R. Klemm, of the Bureau of Education, Washington, D. C.; and Dr. Henry Barnard, of Connecticut.

The President declared a recess until 2:30 P. M.

AFTERNOON SESSION.

The Department convened at 2:30 P.M., President Sabin in the chair.

The following standing committees were announced :—

ON RESOLUTIONS.—Hon. Andrew S. Draper, of New York; Miss Elizabeth Harrison, of Chicago; Supt. J. M. Greenwood, of Missouri; Inspector Jas. L. Hughes, of Toronto, Canada; and Hon. E. B. Prettyman, of Maryland.

ON NOMINATIONS.—Supt. A. P. Marble, of Massachusetts; C. C. Rounds, of New Hampshire; Hon. D. H. Kiehle, of Minnesota; Hon. N. B. Coy, of Colorado; and Hon. W. R. Garrett, of Tennessee.

Dr. Selim H. Peabody, chief of the Department of Liberal Arts, read a paper on the Educational Exhibits of the World's Columbian Exposition.

Supt. F. Treudley, of Youngstown, Ohio, was appointed to report the discussions of the afternoon.

A running discussion followed the reading of Dr. Peabody's paper, consisting principally of questions and answers, participated in by U. S. Commissioner Harris; Seaver, of Boston; Greenwood, of Kansas City; Tarbell, of Providence, R. I.; Brooks, of Phildelphia; Supt. O. M. Brands, of Paterson, N. J., and others.

Dr. W. T. Harris, U. S. Commissioner of Education, read a paper on the World's Educational Congress.

The subject was discusssed by Supt. Lane, of Chicago, and others.

IN MEMORIAM.

President Sabin, addressing the Association, called attention to the fact that the following distinguished gentlemen, members of the Department of Superintendence, N. E. A., had died since our last meeting.

Dr. John P. Wickersham, late State Superintendent of Pennsylvania. Born March 5, 1825; died March 25, 1891.

Dr. John Hancock, late State Superintendent of Ohio. Born February 18, 1825; died June 1, 1891.

Dr. Thomas W. Harvey, late State Superintendent of Ohio. Born December 18, 1821; died January 20, 1892.

Eulogies on the lives and public services of the above were pronounced by the following gentlemen :

On Dr. Wickersham, by Dr. Edward Brooks, of Philadelphia.

On Dr. Hancock, by Mr. W. E. Sheldon, of Boston.

On Dr. Harvey, by Supt. L. W. Day, of Cleveland.

Dr. Zalmon Richards of Washington also addressed the Department.

The President declared a recess until 8 o'clock P.M.

EVENING SESSION.

The Department re-assembled at 8 o'clock, President Sabin in the chair.

A paper was read by Supt. J. H. Phillips, of Birmingham, Ala., on History and Literature in Grammar Grades.

Pres. Charles W. Eliot, of Harvard University, read a paper on Shortening and Enriching the Grammar-School Course.

Supt. V. G. Curtis, of New Haven, Conn., was appointed to report the discussions of the evening.

President Eliot's paper was discussed by the following gentlemen : Dr. Brooks, of Philadelphia ; Hon. John T. Prince, of Massachusetts; Supt. Bouton, of Bridgeport, Conn.; Judge Draper, of New York; and President Low, of Columbia College. President Eliot closed the discussion.

Adjourned until 10 o'clock, Wednesday morning.

A reception was tendered the Department at the close of the session, Tuesday evening, by the Brooklyn Board of Education.

SECOND DAY.—MORNING SESSION.

WEDNESDAY, *February* 17.

The Department re-assembled at 10 o'clock, President Sabin in the chair.

Judge A. S. Draper, of New York, moved that it be the sense of the meeting that persons who discuss papers do so without using previously prepared manuscript. Adopted.

On motion of Superintendent Aaron Gove, of Denver, Col., the Secretary was directed to send the manuscript of the proceedings, addresses, and discussions of this meeting to the printer, not later than March 1, 1892.

Commissioner Harris submitted the following preamble and resolutions, which were unanimously adopted :

Whereas, The World's Congress Auxiliary of the World's Columbian Exposition have made a patriotic suggestion that, at the same time that the Exposition Grounds at Chicago are being dedicated on Oct. 12, 1892, the Anniversary of the Discovery of America, all the people of the United States unite in a celebration of the Anniversary, of which celebration the Public Schools of the Republic be everywhere the centre; therefore,

Resolved, 1. That the Department of Superintendence of the National Educational Association heartily indorse this suggestion, as serving the purpose both of interesting the youth of the Republic in the Exposition, and also of giving to the Public Schools of the Nation a fitting prominence as the fruit of four centuries of American life.

2. That we ask Superintendents of Education and Teachers everywhere in the Republic to unite in the effort to do all in their power to make this National Columbian Public School Celebration universal and successful.

3. That we request the newspaper press of the United States to insure the success of this celebration by lending to it the powerful aid of their sympathy and co-operation.

4. That we name the heads of education in the several States as a General Committee, ex-officio, to be the patrons of the celebration in their respective States, and to carry out so far as they can, the suggestion of the Executive Committee.

5. That a Program Committee of five persons shall be appointed by the Chair to prepare a program of exercises and furnish the same to the Committee of Superintendents to use according to their discretion ; one of the five persons of said Program Committee to be the manager already appointed by Mr. C. C. Bonney, President of the World's Congress Auxiliary.

In accordance with the above resolutions, the following standing committee was appointed :

Francis Bellamy, of Massachusetts; Hon. J. W. Dickinson, of Massachusetts ; Thomas B. Stockwell, of Rhode Island ; Hon. W. R. Garrett, of Tennessee ; and N. C. Hewett, of Michigan.

Superintendent Frank A. Fitzpatrick, of Omaha, read a paper on What is the Duty of the State towards children of Kindergarten Age ?

The subject was further discussed by Superintendents Aaron Gove, of Denver ; Edwin P. Seaver, of Boston ; Miss Elizabeth Harrison, of Chicago ; Inspector J. L. Hughes, of Toronto ; Superintendent W. B. Powell, of Washington, D. C.; Eugene Bouton, of Bridgeport, Conn.; Mrs. Rebecca D. Rickoff, of New York City ; Superintendent W. N. Hailman, of La Porte, Ind.; Judge Andrew S. Draper, of Albany ; Superintendent W. H. Maxwell, of Brooklyn ; United States Commissioner W. T. Harris; and Superintendent Fitzpatrick, who closed the discussion.

During the discussion the following resolution, offered by Superintendent Hailman, was, on motion of Superintendent Maxwell, referred to the Committee on Resolutions :

Resolved, That the Kindergarten as a means to give to the nascent social tendencies of children direction toward benevolence and civic efficiency is a necessary part of a complete system of schools.

Dr. A. J. Rickoff, having obtained permission of the chair, called attention to two circulars that had been placed on the members' desks after the morning session. Both circulars were issued by Dr. W. T. Harris, United States Commissioner of Education.

The first one, dated March, 1891, calls to mind the efficient services of Henry Barnard (1839 to 1849), in reforming the schools of Connecticut and Rhode Island, and that then "having resolved to devote his life to the work of providing easy access to the great works on education in all

languages, through translations into English, he printed and published *thirty-one* volumes of the *American Journal of Education*, containing nearly one thousand pages each, with the result of sinking his own private fortune and embarrassing himself in his old age by debts and mortgages to a vexatious degree."

This circular further informs us that in March, 1891, Dr. Barnard "had on hand at his home in Hartford volumes of the *Journal* and special treatises derived therefrom, to the amount of at least $20,000, counting at half price, together with stereotype plates of the *Journal*, which alone would cost $30,000 at current rates."

Dr. Barnard having thus exhausted his resources and arrived at an age when the further prosecution of the enterprise was impossible, many individual efforts were made to aid him, but they have all proved inadequate. The printed matter was in danger of being sold for waste paper, and the stereotype plates in danger of being sent to the melting pot. To save this valuable material as the nucleus of a standard library for all who are now or in time may become interested in the cause of education or in any department of human culture from the Kindergarten to the University, but one plan seemed available, the formation of a stock company to purchase the entire plant of the *American Journal of Education*.

In the circular of December 1, President Harris formally announces the incorporation and complete organization of the Henry Barnard Publishing Company under the Laws of the State of New Jersey. "The amount of capital stock is twenty-five thousand dollars, which is divided into shares of $100 each, FULL PAID AND NON-ASSESSABLE. Certificates of stock are ready for delivery on receipt of $100 by the Treasurer."

In this circular he also publishes the fact that "the Company has purchased of Dr. Henry Barnard, of Hartford, Conn., the plates, stock, and entire plant of the *American Journal of Education*, to and including Volume 31, and all the special publications derived therefrom, and will continue the publication and sale of these works and of other treatises on psychology, pedagogy, and schools; and that, to facilitate the accomplishment of this object, a contract has been made and entered into with Charles W. Bardeen, Esq., of Syracuse, N. Y., whereby the latter has become the general agent of the Company for the purpose of publishing and selling the works named."

The circular of Dec. 1, 1891, also announces that at the meeting of the Board of Directors held July 2d, action had been taken to establish the Henry Barnard Society, the object of which is to make known and promote a general circulation of Dr. Barnard's publications.

The management of the Society to the end of the year 1893 is in the hands of the officers and general agent of the Henry Barnard Publishing Company, and its business and correspondence will be conducted through them.

The certificate of membership, handsomely engraved by the Homer Lee Bank Note Engraving Company, "bears on its face a portrait of Dr. Barnard, from a daguerreotype taken when he was about to begin his educational publications, and a second, from a photograph taken fifty years later, when about to close his educational activity." On the back of these certificates will be printed the rates of discount allowed to members, as follows:

1. A member paying one dollar for a certificate of membership is entitled to a discount of 25 per cent. on the retail price of any of the Henry Barnard Publications that are kept in stock by the Publishing Company.

2. The payment of five dollars or more for a certificate of membership entitles to a like discount of one-third of the retail price.

3. The payment of fifty dollars or more entitles to 40 per cent. discount.

4. Any number of members having paid, in the aggregate, one hundred dollars for membership in the Society are entitled to appoint a representative to act as a member of the Publishing Company.

5. Any club or other association may in its associate capacity become a member of the Company. In this way the National Educational Association has taken five shares of stock at one hundred dollars per share, and also ordered and paid for five hundred dollars' worth of the publications of the Company, exchangeable for capital stock at the discretion of the Board of Trustees.

Allow me to recapitulate briefly the means by which you may aid this enterprise.

1st. You may secure memberships of either the *Society* or the *Company* from the attendants at State, County, City or Township associations. The names, addresses, and fees of all members of the Society should be promptly sent to the Secretary or agent of the Company for certificate and record.

2d. You may procure the sale of publications of the Company. Complete sets of the *Journal* should be placed in every public library.

3d. By becoming a member of the Company you will help to forward its purposes not only by your financial contribution but by your personal influence.

Finally, permit me to express confidence that by the means proposed the teachers and friends of education in the United States will not fail to lift the burden from the shoulders of Mr. Barnard, who has struggled under it for forty years, and who by old age and by the exhaustion of his own private fortune is now compelled to relinquish any further prosecution of an enterprise which from the beginning was designed, in the language of Dr. Harris's first circular, "to provide easy access for teachers to the great works on education in all languages through translations into English."

The President declared a recess until 2:30 P. M.

AFTERNOON SESSION.

The Department was called to order by the President at 2:30 P. M.

Mr. Charles W. Hill, President of the Massachusetts Schoolmasters' Club, read a paper on the subject: What can be done to bring Children on further in their Studies before they leave School to go to Work.

The question was further discussed by Hon. J. H. Shinn, State Superintendent of Arkansas; Mr. J. H. Blodgett, of Washington, D. C.; E. O. Vaile, Editor of *Intelligence*, Chicago; and Mr. C. W. Hill, who closed the discussion.

President E. H. Cook, of the National Educational Association, made a number of important announcements in relation to the Saratoga Meeting. Judge Draper extended a cordial invitation to the members of the Department and teachers generally, to attend the N. Y. State Teachers' Association, convening this year at Saratoga, and also the University convocation at Albany early in July next.

The report submitted by the Chairman of the Committee on Statistics, Hon. W. T. Harris, National Commissioner of Education, will be found on page 000.

The report as submitted was unanimously approved.

The matter of the selection of the next place of meeting was then brought up by Mr. W. E. Sheldon, in accordance with the action taken on Tuesday. Superintendent E. P. Seaver extended a cordial invitation to the Department to meet in Boston next year. Hon. J. H. Shinn urged that Little Rock, Ark., be selected as the next place of meeting.

On motion of Superintendent Gove, Boston was selected.

On motion of Mr. Winship, a vote of thanks was tendered the people of Little Rock for the very cordial invitation extended to the Department to meet there next year.

Adjourned to meet at the Pratt Institute at 8 o'clock P. M.

EVENING SESSION.

The evening session was held in the auditorium of the Pratt Institute, President Sabin in the chair.

Superintendent John E. Bradley, of Minneapolis, Minn., read a paper on the subject: The Influence of Manual Training upon Habits of Thought.

Superintendent W. B. Powell, of Washington, D. C., read a paper on the question: Is there a Place for Manual Training between the Kindergarten and the High School?

The question was further discussed by Mr. W. E. Sheldon, Superintendent Hailman, Dr. E. E. White, of Ohio, Superintendent A. P. Marble, of Mass., and Superintendents Bradley and Powell, who closed the discussion.

Adjourned to meet at 10 A.M., Thursday.

THIRD DAY.—MORNING SESSION.

Thursday, *February* 18, 1892.

THE Department re-assembled in the rooms of the Brooklyn Art Association at 10 o'clock, President Sabin in the chair.

Supt. W. H. Maxwell extended a cordial invitation to the members of the Department to visit the Brooklyn city schools on Friday.

Dr. G. Stanley Hall, of Clark University, Worcester, Mass., read a paper on the Health of School Children as affected by School Buildings.

The subject was further discussed by means of running questions and answers, many members of the Department participating.

Dr. Nicholas Murray Butler, of Columbia College, New York, offered the following resolution:

That this Department deprecates most strongly the tendency in this country to make the political opinions of school officers a condition of their retention in office, and asks the sympathy and support of intelligent public opinion in wholly divorcing school administration from party politics.

Adopted by an unanimous rising vote.

The Committee on Resolutions, through the Chairman, Hon. A. S. Draper, of New York, submitted the following report, which was unanimously approved:

Resolved, That the thanks of the Department are hereby expressed to the President, Hon. Henry Sabin, and the Secretary, Supt. L. W. Day, for the good judgment and indefatigable effort which have resulted in such complete and excellent preparations for this meeting, as well as for the satisfactory manner in which they have discharged the delicate and exacting duties of their respective positions during the sessions. Their conscientious labors have largely contributed to the great success of one of the largest and most profitable meetings ever held by the Department.

Resolved, That we likewise extend our appreciative thanks to the Mayor, the School Board, the Superintendent of Schools, his assistants, and innumerable citizens of Brooklyn, for the courteous attention and generous hospitalities which have been manifested at all times and on every side, and which will cause every member of this Department to hold this city and its active and generous people in pleasant and grateful recollection.

Resolved, That the Department reiterates the declarations of the National Educational Association in reference to the importance of co-ordinating the Kindergarten with the Common School work of the country, and expresses satisfaction that the movement in that direction seems to gain strength and headway in the succeeding years. The Kindergarten has unquestionably passed the experimental stage, is not only entirely practicable in connection with the Common Schools, but will greatly promote their efficiency and greatly facilitate their work in preparing parents and children alike for the duties and responsibilities of citizenship.

Resolved, That we commend the policy of the General Government concerning the education of the Indians, and urge upon Congress the increase of appropriations for that purpose until schools are provided for all.

Adjourned to meet at 2:30 P. M.

AFTERNOON SESSION.

The Department met at 2:30, the President in the chair.

Mr. W. H. Brett, Librarian of the Public Library of Cleveland, Ohio, read a paper on the Relations of the Public Library to the Schools and Workingmen.

The question was further discussed by Dr. A. E. Winship, editor of the *N. E. School Journal;* Supt. Whitcomb, of Lowell, Mass.; Dr. W. A. Mowry, of Salem, Mass.; Hon. D. H. Kiehle, of St. Paul, Minn.; Dr. H. M. Leipziger, of New York City; Hon. N. B. Coy, of Denver, Colorado; Miss Elizabeth Harrison, of Chicago; Hon. E. B. Prettyman, of Baltimore, Md.; Dr. Brooks, of Philadelphia; Supt. Greenwood, of Kansas City, Mo.; Mrs. Rebecca D. Rickoff, of New York; Dr. Houston, of Philadelphia; Supts. Powell of Washington, Lane of Chicago, Day of Cleveland; and Mr. W. H. Brett, who closed the discussion.

The Committee on Nominations submitted the following report, which was unanimously adopted :

For President, Supt. Edward Brooks, of Philadelphia.

For Vice-President, Supt. John E. Bradley, of Minneapolis.

For Secretary, Supt. J. H. Phillips, of Birmingham, Ala.

Adjourned to meet at 8 o'clock P.M.

EVENING SESSION.

The Department re-assembled at 8 o'clock, the President in the chair.

Dr. Max Hark, of Lancaster, Pa., read a paper on the Life and Characteristics of Comenius.

Supt. W. H. Maxwell, of Brooklyn, N. Y., read a paper on the Text-Books of Comenius, illustrated by stereopticon views.

Dr. Nicholas Murray Butler, of Columbia College, New York, read a paper on the Place of Comenius in the History of Education.

Dr. Brooks, the newly elected President of the Department, was introduced. He accepted the responsibilities of the Presidency in a neat but brief address.

There being no further business, the Department adjourned to meet next year in the city of Boston.

L. W. DAY, *Secretary.*

PAPERS AND DISCUSSIONS.

THE RURAL SCHOOL PROBLEM.

BY HON. HENRY RAAB, STATE SUPERINTENDENT OF ILLINOIS.

When I promised to present at this meeting a "paper" on the "Rural School Problem" I felt conscious that I should not be able to solve this problem; but in the conviction that everything that may help to bring this problem nearer its solution will be meritorious, I undertook to offer a contribution to that end. And the improvement of the rural schools is a task in which every lover of his country and his race may profitably engage. Our city schools, in fact all our schools, do need the thought and work of the best talent, but our social and financial conditions rest more heavily upon the schools of the country, and naturally hinder their growth and prosperity. Where I quote statistics I can give them best for my own State, Illinois, but I believe that, except the former slave States and those recently admitted into the Union, Illinois is a fair average representative of the condition of the schools in the American Commonwealth. The superior or inferior features of the school laws of the different States do not affect the conditions of the graded or ungraded schools in such a manner as to come under consideration here. And what I am able to say about the school laws of my own State, namely, that the people under these laws have the power to make their schools good, provided they will put enough money into them and give them sufficient care and attention, is equally true of the other States. The machinery of administration in some States may not be quite perfect and the application of a little oil in its different parts might prevent friction, yet one thing the school laws of all the States permit the people to do: to employ competent teachers, to giving them permanent positions, and to pay them living salaries. The last two named things, especially, will secure the first, the desideratum in all schools, competent, well-prepared teachers, who love their calling and are proud of their work. For, with the most glorious enactments, the most spacious and well arranged school buildings, the most comfortable furniture, the best text-books and the most ingenious apparatus and contrivances, schools without good teachers are like a manufacturing establishment without the propelling power.

After these prefatory remarks you will at once see where I stand and what I consider the solution of the problem mentioned; yet there are other factors, which enter into the problem, and which have to be discussed. Though it seems scarcely necessary in this assembly of enlightened schoolmen to define what a rural school is, I make free to state, it is a school which is taught by one teacher and in which all ages from six years to majority are represented; a school which is mostly kept open from five to seven months in the year; a school situated all alone in the country and generally more than forty rods from any human habitation. It is distinguished from the graded school, which is situated in a village, town, or city, and is divided into grades according to the attainments of the children, and is supervised by a principal or superintendent, and of which each grade is taught by a different teacher. I very much regret that, for comparison's sake, this distinction does not extend further back than 1880 in the school reports of Illinois, and the numbers for 1880 and 1890 only are here given. Of a total of 704,041 pupils enrolled in 1880, 266,831 were enrolled in graded schools and 437,220 in ungraded schools; in per cent., about 38 of the whole number in graded and 62 in the ungraded schools. The graded schools were taught by 4,908 teachers, or 22 per cent. of all the teachers in the State; the ungraded by 17,340 teachers, or 78 per cent. of all the teachers in the State. Now mark how these figures are changed ten years later, in 1890: Of a total of 778,319 children, 400,159, or 51 per cent., are enrolled in the graded; 378,160, or 49 per cent., are enrolled in the ungraded schools; of a total of 23,164 teachers, 8,462, or 36½ per cent., were employed in the graded, and 14,702, or 63½ per cent., in the ungraded schools. The average number of children taught by one teacher was 47 in the graded and 26 in the ungraded schools; the average length of term in the graded schools was 8.6, in the ungraded 7.2 months; the cost of tuition per capita on the enrollment was $15.43 in the former and $13.25 in the latter per year, or to reduce it to an equality, $1.80 and 1.84, respectively, per month.

What do these figures teach? In the first place it is most conclusively shown that the number of children instructed in rural schools is constantly diminishing; that the cost of tuition in rural schools is higher by a fraction than that in graded schools, owing to the smaller number of pupils intrusted to the teacher in the former compared with that of the latter, and that the salaries paid in rural schools are much smaller than those paid in the graded schools. Were the salaries paid in the country in a measure equal to those paid in towns and cities, the cost of tuition would be about 100 per cent. higher. And what a loss of human energy, when 51 per cent. of the children are taught by 36½ per cent. of the teachers, in the graded schools, and 49 per cent. of the children are taught by 63½ per cent. of the teachers, in the ungraded schools.

I suppose the drift of population into the cities, instead of diminishing,

will increase in the future, and the number of children instructed in rural schools will proportionately diminish, too. The labor-saving machines in agriculture have lessened the number of laborers on farms, and the constant growth of our large cities has correspondingly drawn more men to those centers of population.

But let us look first at the rural school, its grounds, building, surroundings, outhouses, drainage, water-supply, furniture, apparatus, and *teachers*. The picture that I have to draw has a few bright spots. There are rural districts where the culture and sentiment of the people demand good houses, beautiful surroundings, needful apparatus and contrivances, and comfortable furniture, and where the directors have the good sense to seek competent teachers and, when they have found such, to keep them by paying living salaries and sustaining them in their laudable efforts to instruct and educate the children of the district. Such bright spots, however, are the minority; the daubs and blotches, gray in gray, are far more numerous. In many instances the school grounds are bare, the fences torn down and neglected, no shade trees nor flowering shrubs, coal bin open to the depredations of the tramps, outhouses unclean and offensive, no walks nor well, a rectangular, tasteless house, looking more like a barn than a building for human beings to live in. The gable-ends without any windows, the door in one of them, and three windows in each of the long side-walls. The provisions for healthy light, one of the first requisites of a schoolhouse, are totally ignored. The door opens directly into the schoolroom, where, besides the furniture, clothing and dinner pails, and in winter time, sleds and skates and all sorts of things, have to be kept during school hours. (It seems impossible to keep the air in such a room in a condition fit to breathe.) The stove, oftentimes rickety so that it is constantly endangering the lives of the children, overheated in wintertime, causing those that sit near it to roast, while those in the remote corners are shivering with cold; the walls dingy and without plaster in some places, the ceiling black with smoke, the floor unswept, the windows covered with film; such is often the place into which the rural population sends its children. Without sound blackboards, without maps and charts, without globe, reference books or supplies, the teacher is compelled to "make bricks without straw."

Now, all this would not be so bad if care were taken to procure good teachers, those agents who can awaken the minds of the children and lead them to culture and humanity. But what is the practice? The school-year is divided into a fall, a winter, and a spring term. During the winter term, when the work on the farm does not require their presence at home and the larger boys can attend school, a strong, experienced (?) teacher, sometimes a man, is hired; in fall and spring, when only younger children attend, a young, cheap teacher of little experience, generally a woman, is considered good enough for that primary work. What, under such cir-

cumstances, the results must be, needs no comment. If anything is done at all, the teacher can convey some little literary, textbook knowledge; government and moral training receive very scanty attention. Yet, even where the school year is not divided into terms and the teacher is employed for the entire year, from five to eight months, cheapness is the condition on which he or she is hired. That "poor teaching, poor pay" go hand in hand, needs no proof. And where does our supply of teachers come from? When a boy or girl, mostly the latter, has "fagged through" the country school as it is, and has imbibed sufficient textbook knowledge to pass the county superintendent's examination and is of the minimum age at which she is by law permitted to engage in teaching, she goes out in search of a school, and hires to the district at the closest salary they can agree upon. In the name of humanity, I ask, what preparation, what training, have these young people for the responsible office which they are to fill? Do not tell me that "docendo discimus," that by teaching we learn, and that the desire to teach is inherent in man. Like the desire to teach, the desire to heal is inherent in man; yet do you, for this desire, employ every man as your physician? Do you not expect of the one who is to take charge of your body that he undergo a rigid training in a medical college, hearing lectures and dissecting bodies, studying in hospitals and at the bedside, before you allow him to apply the scalpel or to administer physic? Yet, in teaching, no such preparation is deemed essential; the desire to teach stands for the preparation and ability to teach. It is true many have become teachers in the course of years after many sad failures, but the truth is also that only few, as teachers, survive this time of trial and experiment. The average life of the teacher in Illinois in '84 was as follows: In graded schools, men 81.5 months, women 59.5 months; in ungraded schools, men 34.5 months, and women 21.5 months. Or in other words, men in ungraded schools taught almost five years and women about three years. No one will contend that five or three years, respectively, are sufficient time for acquiring experience in teaching, even for teachers who have before had professional training in normal schools.

Since the average experience of the teaching force of one entire State is of so short duration, the graded schools have another advantage over the rural schools, that of supervision. Where in towns and villages more than one teacher is employed, generally the more experienced one is made principal, and to that one the subordinate teachers look for guidance, aid and support, for counsel and admonition in questions of government and instruction. In cities some person or persons are appointed simply for this work. But in the rural schools the young teacher has for days, nay, weeks and months, no one to look after him or her, if a disgruntled parent does not come around to "look after things." The county superintendent would gladly do more in this direction, but the great number of schools and their distance from one another forbid that officer from

doing more. By supervision our city school systems are kept in motion, and somewhat creditable results are obtained in them. Then the city teachers enjoy the advantages of living in constant touch with their colleagues; scarcely a day passes on which questions of common interest are not brought under discussion among them.

I do not wish to multiply the many hindrances to good education in rural districts, but will turn my attention to the means by which the teaching in country schools may be improved. The farmers themselves are beginning to feel that they do not hold the position in the commonwealth which by reason of their numbers, their importance as the principal producers, they ought to occupy. They have organized themselves into all sorts of societies, open and secret; granges, alliances, and clubs are found in many townships. Among a great many impossible things they demand also a great many just things, and in these they deserve the recognition and support of every citizen and, especially, the teachers of the country. When the farmers demand special legislation in their behalf; when they propose to form into a political party by virtue of their occupation; when they expect the government to purchase their surplus produce and store it; when they demand the unlimited issuing of paper money without any funds to redeem it; then citizens, and especially teachers, will respectfully differ with them; but when they strive to improve their social, intellectual, and financial condition, every one may well contribute his share towards the consummation. But as long as the farmers expect salvation from without, they will look for any improvement of their condition in vain, even in the shape of legislation. They can elect public-spirited, liberal men, school directors, vote sufficient funds to maintain good schools, and cause their children to attend these regularly and for the necessary length of time. In the same manner they may improve their condition socially and intellectually. What hinders them from uniting in townships or smaller territories for the purpose of organizing reading circles, debating clubs, dramatic and musical entertainments, and similar pastime? With a little energy and a small outlay of money, not only an improvement of the social and intellectual needs of the farmer will be accomplished but also another complaint would be silenced, namely the drift of the young people into the cities. For, why do the young people wish to leave the country and go into the city, if it is not from the desire to take part in those social and intellectual advantages that city life offers? Perhaps, the expectation of better financial results in the city may lead to this drift. But it is a well-known fact that the fittest only survive and the great majority go under in the race; shattered in fortune many, too many, return to the country to find themselves unable to follow the work there. Used to city ways, they find it impossible to work with energy on the farm. Would it not be better and cheaper for the parents to prepare for their sons and daughters the much coveted

prize at home and allow them under their parental surveillance all those liberties and amusements, those opportunities for mental improvement and recreation, in the country? I believe teachers of ambition, too, could be induced to remain in rural districts where they may have a more blissful field of labor than ever they can find in graded schools.

It seems to me that school officers should labor both in meetings and through the press in this direction to convince the farmers of the necessity of their helping themselves in this matter. If they go on in their present course, the evil will grow greater from year to year; whilst by a judicious self-help the regeneration of the rural schools is not impossible. Even if there should be the present employment of home talent only, that talent will be so much more serviceable and better cultured as the farmers avail themselves of this self-help. In another direction the farmers have to exert themselves. We have seen from the figures quoted that 49 per cent. of the children in rural schools are taught by 63 per cent. of the teachers, or while one teacher in the city was able to instruct 47 pupils, in the country he was able to instruct only 26 pupils, on an average. I know by inquiry from county superintendents made in 1886, that there are numerous districts in which one teacher has an enrollment of less than ten children. What a waste of energy! For the most trivial causes districts are cut in two so that neither has enough assessed valuation of property to maintain a good school. The tendency has been to increase the number of districts, while, for the sake of strong, good schools, the opposite ought to be the rule. This is another text upon which school officers and the press might preach.

Since our people are apt to believe in self-given laws, and foreigners praise them for obedience to these laws, you will expect me also to propose some amendments to the existing acts. The first one I have to make is, what I have always proposed as a condition *sine qua non* for effective work in all common schools, the training of teachers for their calling in State normal schools. The recruiting of the teaching force for the common school from the common school, without professional preparation, is so detrimental to the interests of education, and the lack of provision for the professional training of teachers is so manifest, that it seems to me like "carrying coals to Newcastle" were I to dwell upon this extensively in this assembly. I hold these truths to be self-evident: The State having assumed the control of elementary education for its own sake, it follows that this elementary education should be made as thorough and effective as human skill can make it. Education is both a science and an art. Scholarship alone does not constitute ability to impart knowledge, nor the ability to govern a school well, nor to educate. The ideal of the teacher, namely, to develop the human being in all its powers and to all its possibilities, is not the product of common school life, not even of the high school or college; it must be acquired by careful training and con-

stant exhibition of example to this end. And, when the ideal has been secured, the means leading to this end do not come as a matter *per se*. These means have to be taught, theoretically and practically, so that the teacher may perform his work cheerfully, harmoniously, and successfully, with the least expense of energy and the highest advantage to the taught. What is most conducive to all this, is not acquired by chance ; it can not even be acquired in colleges and universities which make scholarship and general culture their aim ; but there have to be established by the State professional schools for this purpose, the same as law schools for the jurist, medical schools for the physician, theological schools for the clergyman, and all the polytechnic schools for the engineer and architect.

And is not the field covered by education sufficiently large to demand special schools for the training of those who are to engage in it ? The demands made upon the teacher are so enormous, and ought to be great, and the agencies to satisfy these demands are so scanty. Especially in the country is there such a wide field of usefulness for the progressive, enthusiastic teacher. The establishment of libraries, instruction in horticulture, in bee-keeping, etc., the leadership in all intellectual and social entertainments, would be a task that every teacher might be proud to engage in. But in order to do this, the teacher must have superior culture, should be well versed in literature so as to assist in all these laudable enterprises. Would not men who possess these qualifications enjoy much greater confidence and respect than is now the case, when the pedagogue is looked down upon by every one who is competent to earn a few pennies more ? Is is not about time that Ichabod Crane existed in literature only ? But who is sufficient for that circle of usefulness that I should like to see the teacher hold in rural districts ? Certainly not those who graduate from the rural schools such as they now are. The State normal schools should make it their business to prepare their students to fulfill this mission for teachers when they are to take places in country schools. And I have no doubt that, when such usefulness and attendant respect is accorded the teacher in rural districts, he will prefer to remain in the country, thinking like Julius Cæsar : "I would rather be first in this village than second in Rome."

While I like to see women teach in certain departments of graded schools, I think it unwise both for directors to employ and for women to accept places in ungraded schools. While I believe that women when they possess the scholarship and the necessary training can instruct as well as men, I doubt whether they can properly govern a school or exert the proper educational influence over large boys and girls. We cannot close our eyes to this condition of things. There are certain things which women, because of their sex, can not do and should not be made to do. I, for one, have always considered it cruel to place an innocent girl all by herself in a country school, there to watch over the large boys.

This reflection brings me to another one and the last suggestion I have to make. Our country schools need closer supervision. There is more and better work done in city schools because of the supervision. Now, I am not of the opinion that in the country schools supervision is necessary for the enforcement of courses of study, for uniformity of attainments and all those measures which govern the city schools, but for the encouragement and assistance of the teachers and ascertaining whether each one makes the best of his opportunities for the good of the people of the district. There is now supervision, and it is made incumbent upon him by law in Illinois, by the county superintendent; but when you consider a territory of 550 square miles with 200 teachers scattered over it, you will see that close, nay adequate, supervision is impossible. If a law could be passed to enable the districts of a township to unite in appointing a competent teacher, superintendent to watch over the schools of the township, visiting them often and doing all that a principal in a town or village school does, much in the way of better instruction and discipline might be accomplished.

I feel that I have not been able to advance any new thoughts upon the subject of the rural schools. But, on the other hand, I am conscious that startling disclosures could not be expected on this subject. It remains partly in the hands of the farmers themselves, and partly in the hands of our law-givers, to make the best of the opportunities offered them. As the people are the source of all power in our commonwealth, it is also the people who must aid themselves, if they really desire the help which is to liberate them from the vice of indolence and to give them intelligence and culture. I do not preach extravagance, but true economy. Too often the people do not derive the advantages which should accrue from their investments. It will not be necessary to invest 25 per cent. more under the favorable conditions named, to improve the schools 100 per cent. But one thing is needed in addition to the enhanced investments, namely: as much care and attention to the education of the young as the prudent farmer gives to his crops and to his stock. The noblest product of creation is, after all, noble men and women.

DISCUSSION.

[Reported by Supt. J. A. Shawan, Columbus, Ohio.]

Hon. O. E. Wells, Madison, Wisconsin.—The solution of any problem requires us first to find out the conditions, and then to apply rational principles. If there is a rural school problem, it offers no exception to the rule. We are not at liberty in the office or in a convention, to describe ideal conditions to be secured by theoretical applications. A good

system of schools must be a growth under normal conditions and in natural ways. If the people have low ideals, they must be taught higher ones, but it takes time to grasp and to appreciate new and noble ideals. We must study the schools as they now are. We need to know what changes they have undergone or are undergoing. If they are at a standstill, we should know whether they have crystallized at perfection or in deformity.

Complaints and denunciations will work no cure. If the rural schools are ill-housed, it is of no use to rail at the people for giving better quarters to their live stock than to their children. It is not so unnatural that they should do so as it seems at first statement. The farmers' gains are largely due to it. Well-sheltered stock can be more cheaply and better prepared for the market. It is not so easy to see what poor school-houses and untidy surroundings have to do with the child's education, health and morals. The untimely death of the boy may be due to a crack in the wall or a cold floor or to foul air, but the parents are quite as likely to charge it to a mysterious Providence. Bad manners and morals may be due to vile pictures and filthy apartments on the school premises, but it is more than probable that they will be considered as the outcropping of inbred tendencies.

Better school facilities will come with increasing wealth. Comfortable homes will be followed by comfortable schoolhouses. It may be more fitting that these latter should have precedence of barns and sties, but the rule has usually worked the other way. It may be that an educated boy is a more productive animal than a fatted calf, but the fact has not been so readily perceived. There may even be a higher ideal in education than the production of wealth, but the necessity of gaining a livelihood gives money-getting a natural precedence. The stern facts of daily life take little heed of fine theories. This is why there is so much misdirected effort upon the part of the well-to-do. If anything could be done to improve the condition of the masses in material things, the educational and esthetic would not be long wanting. Mr. Carnegie has said, in substance, that it is better for the people that the government should so shape its policy as to concentrate their earnings in the hands of a few, because the money would thus be more wisely spent. It may be true that great universities and public libraries would be built in centers of wealth and population, but it is not so clear that the children of the peasant and the laborer would be better provided for.

It cannot be too often nor too strongly urged that any scheme for helping the rural population must recognize their pecuniary ability, their way of thinking, and their real needs. Their conception of an education as the ability to read, write, and cipher is not illogical or short-sighted. It more nearly meets their present needs than any other ever proposed. Their ideal does not need change but expansion. They need not only to know how to read, but what to read and to love to read. The world has not gone entirely wrong during all the centuries. The instincts of

the people are right. They want, first, the keys of knowledge, and, second, enlarged and enlightened views.

We do not, therefore, need a new system or new machinery. We ought rather to try to perfect what we have. The first requisite is closer and more intelligent supervision. No one will question this who has seen the revolution made by a capable superintendent even in one brief term. It is often said, "As is the teacher, so is the school." With equal propriety may it be said, "As is the superintendent, so are the teachers, and consequently, the schools." The efficient superintendent does his most effective work not by means of legal enactments, but by tactful leadership. His gentlemanly bearing, his scholarly habits, his prudent counsel, his industry and enthusiasm create conditions and direct effort in ways that laws can never reach. In order that this influence may be at its maximum, the superintendent districts should be limited in extent. Seventy-five schools will afford ample scope for the best available talent. If the usual terms could be lengthened and the salary increased to an equality with that paid to the principals of the city schools, the position would attract and hold capable men.

The wise superintendent will strive to introduce proper courses of study and see that they are intelligently followed. He will explain and exemplify the courses, and enforce suitable methods of instruction in examinations, in associations, in institutes, in summer schools, in training classes, and in personal visitation of schools. He will co-operate with high schools, academies, and normal schools, in the preparation of teachers and in securing employment for them. By personal contact and correspondence with the people, by public addresses, by circulars, and with the help of the local papers, he will create and direct public opinion. These are agencies through which he may labor according to his ability.

I know very well that there is nothing new in these suggestions; they are almost as old as the system of public education, and as commonplace as the air or sunlight. This is a commonplace world with commonplace people upon it, whose commonplace wants are met by commonplace substances in nature. The crying need is for common-sense superintendents, with such a love for our common humanity that they can mingle with it, inspire it, instruct it. A system formulated at the capital and imposed upon the people through the aid of subservient supervisors can never affect them as a wise development of their own plans will. One must know the people and sympathize with them if he is to understand their plans and improve them. He must therefore meet them face to face, or address them through their channels of communication. He must also co-operate with the individual and combined efforts of the teachers. Thus the logical development of the agencies enumerated is indicated. The attempt to solve this problem is in the right line. Improvement must come, if it come at all, by perfecting the instruments and agencies. The schools are

not so desperately bad as superintendents commonly think them to be. From the nature of their position they hear the worst side. Everyone with a grievance makes his complaint to the superintendent, and the welkin seems to ring with the cry of strife. Contented people seem to have no voice. A little computation will show that scarcely more than one district in a hundred is really in serious difficulty. The schools are already in process of peaceful growth. The problem is simply that of stimulating a more rapid and healthy growth.

A powerful factor in this development, though not as yet in general use, is the district library. Not a collection of profound and ponderous tomes, but the presence in every school of a few simple, vivifying books. Fables and folk stories, classic tales, stories of travel and adventure, works upon natural history, simple biographies of noble men and women, all these brighten and sweeten life. They should be read aloud in the homes, and not confined to the schools. Books of the higher class will come in their own good time, some of them, perhaps, as supplementary reading, and thus will the pupils grow up in reading and loving good books, and their awakened intelligence will permit no lack of facilities for good schools.

It will doubtless be conceded without argument, that there are defects in our system of rural schools, and that they are generally so well known that I need not now mention them. All plans for their removal may fairly be classed under two heads, namely, the strong government, or "boss" theory, and the self-governing system. The former is more prompt and certain in its operation, up to the point where the will of the people begins to control. It can only be made perfectly effective by taking all administrative power out of the hands of the people. This will require the chief supervisor or state superintendent to be appointed, rather than elected. The local commissioners or county superintendents must also be similarly selected. With a system which would always secure good and wise men and with only wise laws to administer, there might be a speedy uplift which should have some degree of permanence. In a centralized government the chief danger lies in the possibility of a failure at some time to furnish good men and wise laws. Moreover, the necessity for it increases with its growth. The more people are stayed up by outside force, the more will they need to be, and the system is likely to fall the moment the props are taken from under it.

I am aware that an appointive system has among its representatives such men as Henry Barnard and Horace Mann; yet this is hardly sufficient to justify the growing favor with which this plan is advocated in certain quarters. An aristocracy, which is literally a government by the best, is attractive in statement and seemingly perfect in theory, but there is nothing in human history to justify it in practice. It has always and everywhere failed to do for the people as well as they could have done for themselves. The method of self-government may be slower in devel-

opment, but it is in harmony with our political ideas, and the system will be self-sustaining when developed. Mistakes will be made under it, but they carry their own lessons. Those who suffer have the remedy in their own hands. The people now have the control of these schools, and they will continue to exercise it. We can only help to a wiser application of it.

MR. JOHN MACDONALD, Topeka, Kansas.—I think Supt. Raab has very fairly stated the problem, and has also fairly stated the remedies. I by no means take the rose-colored view of our rural schools, that Supt. Wells takes. There is much more than a gentle stimulation needed; there is needed the voice of inspiration heard in the valley of dry bones, we read about in the Bible.

I am sorry to learn that the rural population is decreasing, because from the rural school comes a large percentage of our distinguished people.

The boy from the rural school coming into the city schools with his obtrusive angularities and ungracefulness, is found to be a serious disturbing factor by city principals trying to fit that angular creature into Procrustean grades. That angular boy is far behind his gracefully curved brother from the city, and short-sighted mortals draw inferences. The time to compare and to contrast results is fifty years later, and then it will probably be found that the ungraceful and angular boy from the rural schools is, because of his angularities, far in advance of the city boy.

While in the main I agree with what has been said in the paper, I differ with Supt. Raab, when he says that the people can pay high wages to teachers if they choose. A school district which has an assessed valuation of $8,000, and which is dependent for its revenue on its own resources, and which can levy a tax of two per cent., will at the maximum rate of taxation have a total school income of $160 per annum. Dividing that amount by nine will give a fraction more than $17 per month. How, I ask Supt. Raab, can competent teaching be secured for such a salary as that? There are in the Western States hundreds of districts which have valuations as low as $8,000.

We do need legislation. The ways of the wicked, we are told in the Bible, are unequal. That is true of our school laws.

Yet the prospect is not discouraging. It is only when we look back over twenty-five or fifty years of work that we can see what a great advancement has been made. In my own State of Kansas a vast deal has been done, by normal schools and institutes, to fit teachers for their work.

In this State of New York a great deal has been done to improve the schools and teachers, but now the blighting hand of the politician comes down and checks progress.

We need not look for revolutions in educational work. In that, as in all else, we advance with painful slowness, step by step; but there is cause for supreme thankfulness that it is clearly perceptible: we *are* advancing.

STATE SUPERINTENDENT PRETTYMAN, of Maryland, spoke as follows: The fundamental trouble in the solution of this problem is the want of money. In many localities the schools would be all right if the people were able to pay enough to secure the services of good teachers. The strong should be made to help the weak—this is the policy pursued in the State of Maryland. A few years ago, in a visit to Martha's Vineyard, I found, to my surprise and satisfaction, that the rural schools of Maryland were quite as good as those of New England. We must not allow the cities to control the country districts. In my State the rural districts practically control the cities—the counties have always kept the supremacy. Baltimore, with all her population, has but eighteen men in the lower house of the legislature and three in the upper. On this ground Mr. Bancroft quarrels with the men who made the constitution of Maryland, but we, country people, think it a good thing.

State taxation should be increased to help the weak places. If one county is weaker than another, the stronger should help the weak. The weakest county in our State is Garrett, located among the mountains. At a recent meeting of school officers, held in Annapolis, it was proposed and decided to make a special appropriation for Garrett County for a period of two years. Local taxation is too small to meet the demands of the county, and she is to be allowed to take out four thousand dollars a year for the period named, in addition to her share of the regular appropriation. Baltimore pays out, yearly, one hundred and forty thousand dollars more than she gets out of the school fund, but what of it? She is able to pay it, and ought to be allowed to do so.

C. C. ROUNDS, Principal State Normal School, Plymouth, N. H.—The problem of the rural school, as distinguished from that of the city and the village school, remains essentially the same as fifty years ago, in large sections of our country. While important changes and improvements have been made in centers of population and wealth, the rural school, very generally, is lacking still in the essential conditions of success: a fit school-plant (house, apparatus, library), a well-planned course of study, qualified teachers, an adequate length of school year, regular attendance, and efficient supervision.

While thus lacking, many towns tax themselves for schools at a rate far greater than do cities and towns in which all these conditions are supplied, and yet cannot raise by taxation a sum sufficient for their educational needs without danger of driving away all movable capital. This lack is

itself a cause of increasing difficulty, from the steady diminution of population and resources by the drifting away of the more intelligent families in search of better educational facilities for their children. The rural school has slight representation in educational congresses, and in school reports, mainly statistical, there is rarely a presentation of the bare facts regarding them.

For many years I have known the rural school as it exists in Northern New England, and an earlier experience in the Mississippi Valley, and in other New England States, has shown that the situation in the section which I represent is not unique, though here one defect and there another have been corrected by wise legislation. The situation of the rural school is, relative to others, worse than fifty years ago. The changes which have taken place in the relations between country and city must be recognized. The steady progress toward the depopulation of country towns has become a serious problem. Granted that some of the abandoned farms ought never to have been cleared; granted that changed economic conditions compel the abandonment in many cases; the facts remain that the ignorance which has exhausted, in three generations, the natural fertility of the soil is a factor that could be controlled, and that a better system of rural schools would have enabled thousands of parents, who now go to the village or the city on account of the school, to remain on the farm and still do justice to the child.

Were our population a fixed one we might continue in a course which tends to the production, in many portions of the country, of a class of poor whites, and perhaps the villages and the cities might carry on the United States after a fashion. But this condition does not exist, and it is not alone the intelligence and the virtue of the country which works its way to the city. The country town migrates to the city—the problem of the rural school has become a State question, in which the city has as much interest, in its own defence, as has the country. The tide of movement goes over State lines—the problem becomes one which concerns the nation's peace. Recognition of the truth that education is a debt due to the people, and a necessity to the development of national prosperity, demands that the nation recognize its obligation. The standard should be set by the State, and then what the little rural community cannot do for that education which is the due of its people, these larger communities, the country, the State, the nation, should assume. But this is centralization! What of it? It is un-American. The original American institutions, the wigwam and the scalping knife, we have dispensed with. We have adopted from other lands many good things, as various forms of manual and gymnastic training, the kindergarten and others, and we shall take no harm from adopting for our use at home some principles and methods of administration which have been found promotive of good results abroad.

Hon. ANDREW S. DRAPER, State Superintendent of New York, said: I by no means take the gloomy view of the rural school problem presented by the last speaker. Of course, there are obstacles in the way of educational progress in the country districts, but no greater obstacles than are to be found in the cities. It is no more difficult to overcome poverty in the country than it is to withstand the influences of politics in the cities. Take the position that the school system is a State system, and that the populous centers must help the outlying districts, not only as to methods but as to means as well, and there will be progress in the country. As a matter of fact, there has been great progress among the rural schools in recent years. The buildings have been improved, and the teaching force strengthened. Indeed, the teaching force in the country schools is fully up to that in the cities as a rule. A photograph of the teachers in any rural county of this State would compare in appearance very favorably with a similar representation of a company of teachers in the cities. There is less to inspire healthful growth in the country than in the cities. Pupils are always commencing but never completing a course. There is little to stimulate their energy or reward their accomplishments. This thing needs attention, and it is being attended to. Farmers are slow to appreciate the necessity of the best schools, and they have an entirely erroneous idea, too commonly, as to their right to manage their schools in their own way. The doctrine must be squarely declared, that the people, neither in a city nor in a rural district, can manage schools in their own way unless their way is known to be a good way, unless it is in accord with modern methods. They must be educated to *give* for schools, too. But again I say, all this is being done.

There must be closer supervision in the country than there has been, just as there is now being closer supervision in the cities than there was formerly. It seems to me that there is no occasion for the grave apprehension about the future of the rural schools. Under all the circumstances, they are improving as rapidly as the city schools.

Make the outlying districts large enough to bring together a considerable number of children in the same school; if necessary, provide for carrying children to a good central school, rather than carrying a poor school to the doors of the children; make the supervisory district smaller and provide supervision which is efficient; regulate the licensing of teachers so as to protect the country schools against the imposition of bad work; arrange a course of procedure and systematize the work; insist upon houses that are suitable for schools and upon appliances that are necessary for efficient school work, and results will be attained in the rural districts which will be fully up to the results attained in the cities.

HON. GEORGE H. MARTIN, Agent Massachusetts Board of Education.—Massachusetts has attacked the rural school problem from three sides;

the side of teaching, the side of organization, and the side of supervision.

Most of the rural schools in Massachusetts are in poor towns which have been depleted by the set of population towards the manufacturing and railroad centres. These towns, too, have suffered most from the disintegrating influence of the ancient school-district system. The State has come to these towns with direct financial aid from its school-fund. At various times the mode of apportioning the income of this fund has been changed in the interest of the poorer towns, increasing their grant, and withdrawing the aid from the more wealthy municipalities. Now, no towns having a valuation in excess of $3,000,000, receive any grant. The lower the valuation, the larger the State grant. With the help thus afforded, the towns can afford to employ better teachers, and to maintain their schools for a longer term.

The second means of improvement is by union and consolidation of schools. A State law authorizes towns to appropriate money for the transportation of children. This privilege is generously used by many towns, some spending several thousand dollars in transportation. Small schools are being united, and the plan of bringing all the children of a town to a central school is growing in favor. Several towns have adopted it with success.

By this arrangement the children enjoy the advantages of graded schools, in commodious and well-equipped buildings. There is found to be better attendance, better teaching, better discipline, and easier supervision. It is the most democratic of school systems, giving to all the children of the town equal school privileges.

The third and most important work for the improvement of the rural schools is in securing skilled supervision. By a law passed in 1888, towns having a valuation not exceeding $2,500,000, may unite for the employment of a superintendent of schools. In this union district there must be not less than 30 nor more than 50 schools. The district is formed by vote of the towns, and the superintendent is chosen in joint convention of the school committees of the towns. This leaves the schools wholly in the hands of the people, and meets any possible criticism of the system as centralizing in its tendency. To these districts the State gives direct aid for carrying on their work. The district must raise at least $750 for salary of superintendent. To this the State by grant from the treasury adds $500, making a minimum salary of $1,250, and $500 more to be used in paying the wages of teachers. The conditions of the gift are such that the towns may not reduce their own appropriations. This bonus has acted as a strong incentive to the towns, and 117 of them have been brought together into union districts.

The demand has brought into the work a large number of young men, practical teachers, many of them with normal school or college training.

They are steadily elevating the rural schools, not only through their influence with teachers, but by arousing public sentiment to a more healthy interest in the schools.

Now, 200 of the 351 towns and cities of the State, containing 77 per cent. of the schools and 84 per cent. of the children, are under supervision which is as truly professional as that of the cities has been.

Thus, tentatively, in the three ways recommended by the speakers who have preceded me in this discussion, Massachusetts is trying to solve her rural school problem.

DR. L. R. KLEMM, Washington, D.C.—I have been asked to state how the rural school-problem has been solved in Germany, and to answer a few questions relative to the work done in them. I shall not attempt to compare our rural schools with those of Germany, not because I think the latter superior to ours, but because the conditions of life, society, legislation, organization and management, are so different that a comparision would be manifestly unjust. Each has its excellences.

A plain statement of facts, as I gathered them, must suffice. I doubt not that you, gentlemen, will observe the contrast yourselves. The paternal government in Germany stamps the village school-master an officer of the State and clothes him with parental and almost with patriarchal authority. Behind him stands the ponderous majesty of the State with its numerous ascending degrees of legal and administrative authority. He is not at the mercy of local boards and bad boys. The form of government of the country is reflected, as it were, in the village school. Like the parson and the priest, the teacher is provided with a home and some land. He may not be paid much, but his moral and social influence is very great.

Above all, he is a professional man. The government would refuse to confirm his appointment, if he were not a normal-school graduate, or had not proved to the satisfaction of the authorities that his preparation for the position is fully up to the standard the State has raised, namely that of a four years' course in a normal school. He has a limited knowledge of the history of education, of psychology and logic, of didactics and methodology, of school organization and management, of legislation and sources of school-support. And this has been the case for several generations. The State makes no difference between the requirements of city and country teachers.

Ever since the year 1806, the State, particularly in Prussia, has recognized the truism that "the teacher is the school." Palatial school buildings and the most approved school organization, the most artistic equipment and furniture, the most lavish expenditure and generous payment of salaries, will not make schools, so long as ignorance and inexperience play the rôle of teacher. Hence the greatest source of strength

of the rural or any other school in Germany is its teacher. When Prussia was humbled to the dust by Napoleon, and a rejuvenation of the State was necessary, it was begun by opening teachers' seminaries, and thus providing for good teachers.

Another characteristic feature of the rural school in Germany is the fact, that it is not regarded a mere knowledge-shop in which children can acquire the means of an education: Reading, Writing and Reckoning; but it is a place of training, and religious, moral, mental and physical education. Now if this be so, you may say, and I should consider you poor logicians if you fail to ask it: How is it, that the many peasants who come to this shore from Germany are so poorly prepared, so inferior to the average American farmers? Because the great agency of enlightenment, the press, does not reach them; because their active participation in the affairs of the State has, until recently, been wanting; because they did not, and do not, move about as much as our nomadic population; and lastly, owing to the great poverty prevailing. When the school course is completed, the child's education is completed, and life with its drudgery consumes all his mental stamina. But take the German farmer as he comes to us, place him under American influences, and you see that he is by no means the stupid boor that he is represented on the stage and by the press. That he cannot express his thoughts glibly in English, on the stump, or at a love-feast, does not prove that he *has* no thoughts. When the hour of decision comes, he expresses his thoughts by means of his ballot. He has learned to think for himself, and the village schoolmaster at home deserves a small part of the credit.

This brings me to the question I have been asked: How does the rural teacher in Germany secure sufficient time for each recitation and lesson, to probe the subject under discussion to the bottom? My answer is that more time is given daily than here, I believe; that the dates of admission are as well fixed for rural schools as for city schools; that the population is not a nomadic one; hence, that the simple conditions of grading are fulfilled. The average attendance is reported to be not less than 90 per cent. of the enrollment. Every German school, even the one-room school, is required to arrange for three grades: a lower, middle, and upper grade. By skillful discrimination in his questioning, the teacher helps on the pupils further advanced, as well as those who are still beginners. I have seen rural schools in Germany with 80 pupils in regular attendance, and never observed more than four divisions in arithmetic and reading.

Again I am asked: How does the rural teacher succeed in probing the subject of a lesson in such a manner as to get behind the words and down to the things and essential phases of the subject? Simply by beginning with the things, and naming them afterwards. It never occurs to him to begin with symbols. But even when the language claims consideration, he has an advantage, the want of which makes us work against heavy

odds. The German language being a consistent language, its abstract derivatives betraying the meaning of the root-word, and conveying their own definitions, make unnecessary a great deal of defining which we here must indulge in. For example, the German says:

Wohlthuen—doing good.
Wohlthat—benefit, blessing.
Wohlthäter—benefactor, donor.
Wohlthätig—charitable.
Wohlthätigkeit—charity, etc.

You see the English-speaking child has to hop from one compartment of his language to another, to find the proper expressions, and is so obliged to spend much time in defining the meaning of words. Here is another example: The German has the verb Gehen, ging, gegangen—to go, went, gone. From the root in the participle he makes Gang—the walk; Ein- and Ausgang—entrance and exit; Hausgang—corridor; Säulengang—portico and veranda; and so forth; a great number of words all of which are derivatives and combinations that betray their own meaning without further definitions. A simple school dictionary gives fifty-three different English words in lieu of these, all, or nearly all, of different origin, from the Latin and Greek, the Norman-French, and Anglo-Saxon. It stands to reason that the German teacher is confronted with comparatively small difficulties. Where he can bestow his attention upon facts, we have to think of the garb in which to clothe the facts.

How are the pupils made to study at home? is another question. If by study we mean obtaining new knowledge, digging it out from the printed page for to-morrow's lesson, I shall say, *they do not study at home.* They only do exercises, write out what has been learned in school, practice penmanship and drawing, do additional examples in arithmetic, similar to those gone over in school; they are told to read and review; but it would not occur to a German teacher to set his pupils to learn new lessons at home. In short, the pupils merely digest and assimilate what they have acquired and experienced in school.

Most of these remarks tend to show that the rural schools in Germany are very different from ours. But it does not follow that we should in every particular imitate the Germans. Aside of the pedagogical considerations, that the teachers be better prepared, and that, as a natural consequence, better teaching may prevail, I find little there to imitate. It is not so much a pedagogical problem, we are discussing, as a social one. Our form of government, our social equality, our mode of life, our view of the world, our methods of action, our ideals, all tend to confirm us in our present practice, which is to leave the individual to work out his own salvation, to develop his own characteristics, not to mold him into a being that conforms to fixed types prescribed by a State that stands above him. Hence, I express my sincere conviction when I say: The rural

school problem in this country is much less of a problem than it would be in a monarchical state, simply because, like all institutions in a republic, it has its corrective in itself. The people apparently don't want any other schools than they have, and where they *do*, they get them in the only way possible under heaven—by obtaining the teacher that will make the school better.

DR. HENRY BARNARD, of Connecticut, being called out, said: This was the problem of fifty years ago. What I have to say is in the line of these suggestions. One is the raising up of teachers adapted to country service. Not every good teacher would make a good country teacher. Every city of the land depends upon the boys of the country.

We tried fifty years ago to solve the problem, as has been indicated here. We tried to make smaller districts. We tried to keep good teachers in the country schools. I was successful in my State in getting an extra fund for this purpose.

We have made a great mistake in the organization of our normal schools. There should have been, at least, one having for its special object the qualification of teachers for country school work. This might have been migratory in character—a prolonged institute.

When $10,000 were granted for normal schools in Massachusetts and three normal schools decided upon, I took the ground that there should be one for the cities, one for the villages, and one located in a country district, with special reference to the needs of country schools. Every subject increases the difficulties of the country teacher, and he especially needs wisdom and direction.

I believe in the well-educated female as a supervisor of schools. At my suggestion a lady took charge of the schools of a district in Rhode Island, and accomplished wonderful results. She went to work with the mothers, invited them to go with her, and thus impressed upon them the conditions. Improvements were suggested, apparatus, etc., with good results. At the end of the second year all the children of the district were gathered together, and an entertainment given. The performances would compare favorably with those of Providence.

THE EDUCATIONAL EXHIBIT OF THE WORLD'S COLUMBIAN EXPOSITION.

BY DR. SELIM H. PEABODY, CHIEF, DEPARTMENT OF LIBERAL ARTS.

The Educational Exhibit will be installed chiefly upon the ground floor of the Main Building, which has been assigned to the Liberal Arts and to Manufactures. It will occupy the entire south end of the building, and will be approached through the lofty entrances opening upon the Grand Avenue that connects the principal marine and railway entrances to Jackson Park. The space given to the Educational Exhibit is about 200,000 square feet, or between four and five acres. Adjacent to this will be arranged the exhibits of music, literature, physical apparatus, hygiene and sanitation, medicine and surgery, etc.

The Educational Exhibit will be organized both by States and by grades. Each State will occupy a definite area, which will be assigned with reference to the elements which the several States will have to represent, as nearly as that can be ascertained. These areas will be side by side, in parallel subdivisions extending north and south. The arrangement of the elements in the several States will be expected to conform to a general plan, presenting the several grades in consecutive arrangement extending east and west. The studious observer may follow the grades, from the most elementary to the most advanced, in any State; or crossing the areas he may trace the similarities or variations in any chosen grade. The parochial schools will have a definite place in the scheme, conformably to the same system.

Each State exhibit will include:

1. A presentation of its public school system.
2. Its academies, normal schools, colleges, and universities.
3. Its special, technical, and professional schools; except in cases where a specialty in education can be better illustrated by a collective exhibit, independent of State lines. Thus, there will be a single collective exhibit, showing library organization and management; one of commercial schools; of manual training-schools; of trade schools, etc. This method should probably be adopted, with exhibits of schools for the blind, the deaf, etc. The ruling idea will be to bring into the closest local relationship those elements which have the closest educational affinities, thus to offer the best opportunities for interesting comparison and critical observation. In some cases these benefits may be secured better by observing State lines; in others by obliterating them.

An earnest desire has been expressed, both in private and by resolutions publicly adopted, that all grades of educational work should be shown in active operation, in the actual work of living teachers upon living pupils. The suggestion is an attractive one. It has received careful consideration.

In its discussion, no question has been raised as to space, or expense; but only, Is such a presentation of schools a feasible project?

All worthy teaching aims to aid the growth of the soul, and the discipline of the intellectual powers. The larger part of the work employs only the reactions of intellectual and spiritual forces. Yet certain forms of instruction find abundant uses for material and concrete modes of illustration and such as can be practically applied. The public mind, seldom philosophically accurate, readily groups our work into two divisions, according as they are supposed to present more notably, in practice and in results, the intellectual or practical phase. The latter kind of work may be illustrated to some extent in active exhibits, pupils and teachers working together, as in the kindergarten, the sloyd, manual training, laboratory work, physical culture, etc. Facilites for this work will be provided.

The attempt to present forms of class-room work, other than that just named, will not be made. The conditions of a World's Fair in intensely active progress, the throngs of visitors, the tumult of distracting events, sights, sounds—strange, brilliant, exciting, engrossing—will inevitably remove from the minds and hearts of both pupils and teachers the quiet environment and the inspired attention indispensable to either teaching or learning. The Commissioner of Education, commenting upon this subject, asserts that "the atmosphere of an international exposition is convulsed with a spiritual tornado;" that it "will require supernatural powers either to teach or to study in such a place;" and that "the instruction will speedily drop to the purely mechanical level, and become both an untruthful and an undesirable presentation of American education."

In the presentation of public school systems, the several States and Territories will be the smallest units for which separate provision can be made by the Chief of the Department. Cities, villages, and rural schools will find such recognition and representation as can be allowed within the limits assigned to the States which include them. The educational exhibit from each State will be under the immediate supervision of a duly authorized executive officer or committee, who may have been selected by the State Commission for the World's Columbian Exposition, or may be the State Superintendent of Public Instruction, or a committee representing the State Association of Teachers. It is not presumed that any conflict of authority can arise, but that in each State such amicable arrangement will be made as will harmonize all elements, and thus promote the most complete success. In every case the exhibit will be subject to the ultimate supervision of the Chief of the Department, acting under the Director-General of the Exposition.

So far as is practicable, the higher institutions of learning, colleges, universities, technical and professional schools, will be arranged according to the sequences of their respective States. This plan may be varied when it shall appear more desirable to unite more closely the elements of any specific phase of work, to facilitate comparison and study. The State executive officer will naturally extend to each collegiate institution the largest liberty in arranging its own affairs. Colleges and special schools may apply to the Special State Commissioner, or directly to the Chief of the Department. All distinct applications for space must be entered in the office of the Director-General.

The assignment of space to the several States and Territories will be determined by the information secured as to the character of the respective State exhibits. Evidently, the most suitable division will not give to each an equal allowance, or one proportioned to area, or population, or even to school attendance. The State which has made the most decided educational progress, and has the best harvest to show, should have the best opportunity to show it.

Each State should present a clear and concise epitome illustrative of its public school system. The conditions in the several States vary widely. Exact rules of procedure cannot be formulated. Reliance must be placed upon the good judgment, invention, taste, and skill of the several State executive committees, and the teachers and school officers co-operating with them. The general regulations of the Exposition, as well as the special rules of the Department of Liberal Arts, must be observed.

The several State exhibits will show some or all of the elements to be enumerated, and substantially in the following order of arrangement.

1. ORGANIZATION AND ADMINISTRATION.—A map of the State upon a generous scale, readable at a distance of fifteen or twenty feet, showing by suitable conventions of color, the location of every educational institution, from the common school up, proving in many instances that the school house crowns every hill top, and nestles in every valley. That the colors may be uniform, special directions and scale will be furnished by the Chief of the Department. Diagrams may show, by the graphic methods so well understood, the progress of education, by years or by decades, in the history of the State; as to the kinds and values of school buildings; the numbers of pupils, by ages, sexes, colors, and grades; the numbers of teachers, actual and related to number of pupils, and their ratios by sexes; the cost of schools, actual, and in ratio to other taxes and to the wealth of the State; illiteracy; statistics of public and of school libraries, etc., etc.

The authorized or approved courses of study for rural, city, and village schools. Qualifications for admission to various grades, and for graduation. Qualifications of teachers; length of service; opportunities for improvement by institutes and normal schools.

The school law; division of territory into districts. County, township, or district organization. Manner of election, term of office, and duties of school officers, trustees, boards of education, city and county superintendents, etc.

2. SELECTED SPECIMENS OF THE ACTUAL WORK OF PUPILS.—Concrete results, drawings, maps, essays, examinations, apparatus, shop-products, etc. The evident danger here is that there will be gathered a wilderness of material which will appall the visitor by the magnitude of the exhibit, and the endless repetition of similar things. It is not necessary, when showing the splendid agricultural resources of the State of Illinois, that a sheaf of wheat and a shock of corn should be offered from every farm, or every township, or even from every county. The teacher, as well as the farmer, must content himself by showing in a limited way that which is CHARACTERISTIC, and that which is BEST. For this reason it is evident that complete exhibits from organic units less than the State, as cities, counties, etc., such as might be appropriate in an exposition representing a territory of smaller extent, cannot be provided for in this. It is not possible to assume that every city or county can have a distinct representation. But whatever is shown should be carefully credited to its source.

As before suggested, the method of obtaining pupils' work must be entrusted largely to the discretion of the State executive authorities. Whatever method is adopted, much stress should be laid upon the injunction that every item of work presented as the product of the pupils should be absolutely genuine. The interference of a teacher, even to the correction of an obvious mistake, the retouching of a shade in a drawing, the fitting by a shaving of a joint of woodwork, the dotting of an "i" or the crossing of a "t," should be deemed an inexcusable fault; and any work so "improved" should be rigorously rejected. Each item should be forwarded exactly as the pupil left it. No special instruction, practice, or drill should be given to any pupil, class, or school, preparatory to work which is intended for the Exposition. The actual fruits of the regular school system should be presented without being worked up for this special purpose.

The Educational Executive Committee in each State will collect, select, prepare, forward, and, under the approval of the Chief of the Department, install the material for the State exhibit. The following plan of selection is suggested, but will not be insisted upon, if a better can be devised:

Let the Executive Committee in each State appoint a series of days upon which papers may be prepared upon assigned subjects by the pupils of all schools which wish to offer work for exhibition; one day for history, another for grammar, another for essays, etc. Questions prepared under the supervision of the State executive are distributed under proper precautions and regulations; an equal number are added in each community, prepared by the local officers, the work to be done on the same day, and

between given hours, the pupils to have a given time for answering the questions, and for making a fair copy of the answers upon paper of a prescribed form and style. Let the teacher select the best portion, say one-fourth, of the papers presented by his class, to be sent to the next higher officer, say the principal of the school. From these papers let the principal select, say, fifteen or twenty, which shall be put together as the work of the representative class of that school upon that subject, and be sent to the superintendent of the town, city, or county. From the classes which come to him, let the superintendent select that class which he will send forward to represent his city or county in the State exhibit. If the number of pupils in the city be large, let a number of classes be thus sent forward, proportioned to the number of pupils to be represented. From the classes thus received let the State executive select a given number, say fifty or sixty, or even a larger number, which may go forward to the Exposition. It will happen that in a given city one school will win the honor of sending forward the representative class in one subject, another in another, and so on. It will be possible that every community which is really excelling in some particular may have the honor of being represented in something in the final selection. Each pupil will feel that the honor of a position in one of the representative classes is worth striving for, and these honors may be distributed among a great number, while the principle of the survival of the fittest will have its application.

After the representative class in any school has been selected, let the members be photographed together in a group, the photograph to be the frontispiece of the papers that the class has written, to be followed by a neatly engrossed statement setting forth names, ages, nationalities, grade in school, length of time in grade, etc., after a form to be presented by the State Committee. To this might be appended a further statement setting forth the facts concerning the numbers represented by the class, the course of study, and the place of this subject in the course; time devoted to it, methods of instruction, etc., etc.

The work of similar classes may be bound together in convenient volumes, plainly lettered on the side to indicate the facts in the case.

Drawings, elementary, from the flat, from objects, designs, maps, etc., may be selected in a manner somewhat similar; but it may not be practicable to order special examinations from a central point. Some drawings may be produced, like examinations, within a limited time. Advanced pupils may be encouraged to offer more elaborate work, designs, sketches, finished drawings, from nature, from life, etc. In such cases each drawing should bear a legend, giving, in addition to the name, age, etc., of the pupil, a statement of the amount of time given to drawing; the time, in hours, spent on the given piece of work; whether it is original or copy, and with or without aid from the teacher, it being understood that aid was limited to advice or suggestion, and that in no case was any

mark or erasure made by any person other than the pupil whose name is attached.

All drawings with pencil, crayon, chalk, etc., should be "fixed" to prevent rubbing. They should be of such size as will permit mounting on cards twenty-two inches wide by twenty-eight inches high. Smaller drawings may be grouped on cards of the same size, when it can be done consistently with harmony of arrangement and economy of space. A limited number of pictures of special merit may be framed and glazed, but the framing should be modest and unobtrusive.

Photographs will be found useful throughout the exhibit. They may illustrate schools in operation, exteriors, interiors, classes, museums, laboratories, special apparatus, etc. The best size will be eight inches high by ten wide, of which six may be mounted on one side of the card described above. They may be placed on both sides of the card, the card to be mounted on a "wing" frame, by which device a large number may be shown in a small space. As a rule, photographs should be sent *unmounted* to the State Committee, which may then arrange them in an orderly and systematic manner. Each view should be accompanied with a full description.

School architecture will form a valuable element of a State exhibit. Sets of drawings of school houses, existing or proposed, may show floor plans, elevations, perspectives, systems of heating and ventilation, lighting, etc. They should be drawn to an uniform scale of one-fourth inch to the foot, and should be bound together in sets in folios. In some cases the perspective may be framed, reference being made to the folio which contains the remaining sheets of the design. An historic series of school houses will be instructive, presenting the oldest as well as the newest examples, and including the very humblest, the log-houses, sod-houses, dug-outs, etc. Bonaventure's tobacco shed would be a welcome addition.

A special department will include architects' plans, designs, etc., and these will not find a place in the State exhibits.

Evidently a part of each State exhibit will illustrate general progress and the status of affairs as a whole. Another part will show material gathered, as previously suggested, or otherwise, from all parts of the State. This is the portion which will present most of similarity and repetition. To relieve this in a measure, to economize space, and at the same time to give wider range to the exhibits from cities and schools, the following plan is suggested:

After the work, which is deemed worthy of presentation, has been carefully selected, let that from the public schools be divided into four parts as nearly equal as possible in quantity and value; let each element, as primary, secondary, etc., be included in equal portions in each division. At the opening of the Fair one-fourth of the material will be placed on

exhibition, while the remainder will be placed in drawers, where it may be easily accessible if there should be any reason for consulting it. After six weeks the first fourth may be withdrawn, and the second fourth put in its place, for a similar length of time, and so with the other portions. Many advantages will accrue from this method of treatment, which will be apparent without explanation.

It will be more logical to place special schools alongside their corresponding grades of public schools, than to separate out two distinct series, public and private, in the same State exhibits. Kindergartner's work should be placed near primary work, but not confused with it. Along with high-school work, come all forms of secondary instruction intermediate between the grammar school and the college, except such as may be grouped by themselves as specialties. Then follow normal schools, colleges, schools of agriculture, of technology, universities, with their professional schools, and professional schools detached. It will not be possible, and it might be invidious if possible, to attempt any sharp gradation among institutions of higher grades. They will form a group, whose arrangement must be determined by good nature and convenience, bringing kindred institutions as much in line as possible.

An exception has been suggested as to manual training schools, which will apply to some others of a similar character. As before explained, provision will be made for a series of active exhibits of this practical kind. These exhibits will not form a part of the systematic organization which has been described, but will have a place near by, and at the same time withdrawn from the busiest throng of visitors. They will be easily accessible, but not on the thoroughfare. It will probably follow, that the manual training exhibits should be grouped in the immediate vicinity of the active exhibit of that specialty. The same may apply in like cases.

College and university exhibits will vary greatly, both with the character of the institutions themselves, and with the genius and skill of those who prepare them. In this respect technical departments and schools will have a decided advantage, because their work lies so much in the horizon of the material and the concrete. It will not be so easy to present logic or logarithms, as it is to show chemistry, or art, or shop-work.

If one were endeavoring to present a college, he might wish to show, by graphic methods, its history, its development, its progress, its faculty, its courses of study, its requirements for admission and graduation; the number of its students by classes and sexes, and departments; its alumni, and if possible, it would be interesting to follow those alumni into life and to show what they are doing and have accomplished. There may be views of buildings, without and within; illustrations of equipment, and of all beautiful features, natural and artificial. There should be portraits of founders, presidents, notable professors, and of

such alumni as have achieved distinction; usually those who would be particularly anxious to appear in such a portrait gallery, are they who should be excluded.

That which is shown should present something that stands for an achievement or a product of the institution, not something that it has been rich enough to purchase. If a professor has devised a new method of investigation or of instruction, has invented a new piece of apparatus, or a process, we wish to know it, and it should be presented with such accessories as are needed. Apparatus which will illustrate the growth of any science or art, which will present the history of its development, will be particularly desirable. If that which the venerable Professor Snell had gathered at Amherst, much of it his own handiwork, had not perished it would fill a most important place in the Exposition. But the ordinary equipment for instruction should not be brought forward. A professor of civil engineering need not occupy space with a transit and level, and a sheaf of arrows, unless his own brain has exerted its formative power upon these very instruments, so that they are his in some way more intimate than because he has paid shekels for them. Any other possessor of shekels may do the same. The Exposition has other places for this sort of display.

Some institutions may make a valuable exhibit by showing the achievements of their alumni, in those lines which represent the natural outcome of their college discipline. Besides the portraits already suggested, there may be tablets, or scrolls, on which will be written the names of those who have added to the renown of their *alma mater* by service in their country's defense, on land or sea; they who have been chosen to places of honor and responsibility, congressmen, governors, foreign ministers; they who have won distinction as jurists, clergymen, physicians, teachers, inventors, etc. What a glorious diadem would be a collection of all the books which have been written by the alumni of one of our older universities, say Harvard, Yale, or Columbia! Many of these institutions have precious relics of the olden time, like the crown in the library of Columbia College, sent by the King of England, when the college was called Kings; manuscripts, missals, charters, etc., which, in fact or in fac-simile, they might use to add interest to their exhibits.

The space assigned to this exhibit is by far larger than was ever before offered to this interest. It is in the choicest place in the Exposition. It is environed by the great departments, every one of which is its child, some of them, in former expositions, being included within its fold. If to any the space still seems inadequate, the remedy is to fill that space with only the noblest and the choicest material, leaving behind all which is feeble and commonplace. There is room enough, there is material enough, to make the Educational Exhibit the jeweled crown of the World's Columbian Exhibition.

DISCUSSION.

[Reported by Supt. Treudley, of Youngstown.]

Upon the conclusion of Dr. Peabody's paper upon Education at the Columbian Exposition, Dr. Harris asked if it would not be well could an approximate assignment of space now be made. To this Dr. Peabody replied, that could he know the representations to be made by each State, he could tabulate the facts and make it the basis of a suitable division. As it was, he had sought, by correspondence, to ascertain as far as possible what was desired, but thus far had not succeeded, owing in part to the fact that in many States it was not known what financial aid could be secured, etc., so that for this and various reasons, he felt that to do this now would necessitate its being done again at a later date, and he preferred waiting until the allotment could be permanently made. To the question whether any State would be permitted to hold its educational exhibits elsewhere than on the allotted space, he said that the Illinois exhibit would be held in its own building, but that the purposes of the other State buildings forbid.

Dr. Seaver, of Boston, raised the question whether the large cities should not be allowed to make exhibits of their school system separately, just as the States, thus permitting comparisons of systems of city schools, and saying that while Boston would cheerfully co-operate in the State exhibit of Mass., it was heartily desired to exhibit at Chicago her system of public schools as had been done in former International Expositions. He held it to be of equal importance that the cities of the country be represented and their work subject to comparison.

Upon this, remarks were made by Mr. Tarbell, of Providence, R. I.; Dr. Brooks, of Philadelphia; Mr. Greenwood, of Kansas City, and others. To Mr. Tarbell's question as to whether any deductions were to be made from the allotted space of 200,000 square feet for foreign educational exhibits, the statement was elicited that all the exhibits of England, France and Germany would be held in the spaces assigned to these countries. Dr. Brooks thought that it was an important matter to compare city systems with each other, but held that comparison could not well be made between the large cities and small cities, towns and villages. To illustrate, he cited the fact that the High School of Philadelphia was a college granting degrees, with which high schools as ordinarily understood could not justly be compared.

Mr. Greenwood thought some guiding principle other than size should be considered if city systems were to be compared. To a remark of Mr. Burns, Dr. Peabody stated that the failure of any State, in its corporate capacity, to make appropriation for the representation of its interests, would not permit the acceptance of individual efforts for such representation.

THE WORLD'S EDUCATIONAL CONGRESS.

W. T. HARRIS, COMMISSIONER OF EDUCATION, U. S.

IT has been well considered by the World's Columbian Exposition at Chicago, that side by side with the exhibit of the material resources of all nations there should be an exhibit of the spiritual achievements. To use the words of the announcement, "To provide for the proper presentation of the intellectual and moral progress of the world," there should be held "A series of World's Congresses with the assistance of the leaders in all the chief departments of human achievement."

Acting on this idea a programme has been mapped out which sets apart each of the six months of the exposition for some one class of these congresses. First the month of May, 1893, is set apart for art, literature, and music. It is very appropriate that the series should begin with a discussion of the spiritual activities which have for their object the artistic display of human nature—the manifestation of spirit in material forms—because the whole exposition rests on this idea. Every international exposition is a revelation of the ideals and achievements of the peoples of the world.

For the second month it is proposed to hold the congresses and conventions that relate to religion and morals, including temperance, social reform, and the suppression of vice in all its shapes.

The third month, July, is set apart for education in its various forms. This is the special month which interests our National Association. But not merely school education is provided for in congresses. Besides this there are all manner of learned societies devoted to science, philosophy, and invention, which are to meet in conference.

For August the congresses of jurists, the students of politics, the framers of laws, and the military; also the secret societies.

September is set apart for labor congresses and kindred movements; while October closes the series with congresses of agriculture, commerce, and finance.

The bare mention of these great spiritual interests impresses us with their vastness. In order to properly provide for such a series of congresses it became evident that a separately organized directory body had to be formed with nearly as much work on its hands as the business of the main exposition. The directory to whom is intrusted this series of congresses is called "The World's Congress Auxiliary," and it consists of local committees resident in Chicago and of advisory councils residing in vari-

ous parts of the world. The committees resident in Chicago are charged with the management of the whole enterprise.

Returning to the educational congresses in which we are especially interested we note that local committees and advisory councils have been formed on the departments of higher education, public instruction, music, teaching, instruction of the unfortunates, and special education. The special committee of ten from the National Educational Association appointed on "The World's Congress of Educators" has been recognized and made an advisory council on public instruction. Inasmuch as the National Educational Association has nine departments and represents that number of educational interests, your committee have been at first somewhat embarrassed by seeming to find their functions limited to the office of making suggestions to the local committee in Chicago on the subject of public schools and excluding the topics of higher education, manual training, music, and the kindergarten. A correspondence with the President of the Auxiliary and a full and free conference with the local committee on public instruction have removed nearly all of our difficulties and the way seems now open for the following course of action.

The committee will act in conjunction with the local committee as a joint committee, and adopting the action already taken by the latter, proceed to complete the organization of the several departments of the Congress by inviting distinguished educational specialists from the several States and from foreign nations in Europe and on this Continent to join in the work of the following named sections:

(*a*) The Kindergarten.
(*b*) Elementary Instruction.
(*c*) Secondary Instruction.
(*d*) Higher Instruction.
(*e*) Normal Instruction.
(*f*) The Superintendence of Schools.
(*g*) Industrial Education.
(*h*) Art Education.
(*i*) Musical Education.
(*k*) Educational Publications and School Journals.

These sections, omitting the last, cover exactly the scope of the National Educational Association, and if it is to move at all in this matter of an international congress it seems to your committee that it should undertake all these departments.

Let us suppose for one moment that the higher education were to be omitted from the programme as provided for in your committee. This would imply that the department of higher education in the National Educational Association is not a representative body of such dignity as to stand for higher education in this nation. It would mean such a slight to this department, that in future there would certainly be a decline of

the interest which has grown up in later years. What would be the effect of abolishing in the National Association the department of higher education ? The educative influence that comes from association with the best educated teachers in the country would be all lost for the teachers and superintendents of the lower schools. We may add, too, that the managers of higher education would give up by the same act of withdrawal that inter-communication with elementary and secondary education which the National Educational Association has for a long time cultivated. This, too, would happen just at a time when important changes are proposed in the course of study of the common schools to effect an earlier preparation for college. There has never been before an epoch when elementary and secondary education seemed to be on the point of being enriched through the studies made upon it by the leaders of higher education. We especially in this department of superintendence have profited repeatedly from the sharp and wholesome criticisms of the President of Harvard University and the President of Clark University.

Just now, too, the management of the National Educational Association is reaching out wisely to add dignity and usefulness to its influence by applying a portion of the proceeds of its large and increasing endowment funds to publish and distribute full reports of its proceedings ; to offer annual medals as a recognition of the most distinguished educational contributions of the year ; to establish conferences for distinguished specialists at its annual gatherings, and by these to attract those rare minds engaged in original investigation to our annual meetings.

Whatever injury would come to the National Educational Association if the department of higher education were to be withdrawn or even slighted, would happen in a less degree if any other one of its nine departments were thus removed. I think that it is clear that we must insist on the representation of all our sections in the National Congress.

But on the other hand we see the necessity of the local executive committees at Chicago, and must not propose to them any abdication of their rights of final adjudication in this matter. Although our committee desires to act, it must act subject to the approval of the local committees of the Auxiliary.

What shall be the scope of the World's Congress ? The programme must be skillfully prepared, and distributed throughout this country and Europe before the coming summer. The questions must be of international interest and not mere local questions.

The following list has been prepared and printed by President Bonney of the Auxiliary, and we can all see that it touches live questions in our education systems :

(*a*) " The rational limits of education for children under five years of age, and the like limits for children of ten, fifteen, and twenty years of age, respectively.

(*b*) The rational limits and practical utility of recitations and examinations.

(*c*) The rational methods of control and discipline.

(*d*) The essential principles and proper place of kindergarten education.

(*e*) The essential principles and proper place of manual training and art education.

(*f*) The proper office and use of music in the public schools.

(*g*) How far agricultural chemistry, economic geometry, economic entomology, and the like branches, should be made a part of the course of instruction in the common schools of agricultural districts.

(*h*) How far the use of tools, and the sciences applicable to the mechanical arts should be made a part of the course of instruction in schools in villages and cities.

(*i*) How far the laws of life and health, and the use of remedies in case of accident or other emergency should be made a part of the course of instruction in the common schools.

(*j*) How far the subjects of civil government, embracing the holding of public meetings, the conduct of public business, and a knowledge of the laws involved in the every-day proceedings of common life, should be taught in the common schools.

(*k*) How far the universal principles of morals and religion should be taught in such schools.

(*l*) The extension of higher education among the masses of the people.

(*m*) The school library as a means of education.

(*n*) What reforms in the architecture of modern school buildings and in school furniture and apparatus should be recommended.

(*o*) Whether the existing educational systems may be best adapted to the recent enormous increase in all departments of knowledge by dividing the educational term into three periods, during the first of which the scholar should be taught the merest rudiments of the largest practicable number of branches of knowledge, but the details of none except his own language and matters necessarily incident thereto; and during the second of which periods he should be taught the exact details of a special course of instruction, selected with reference to his future calling in life; and during the last of which he shall be taught the practical application of technical knowledge to the subjects involved in his proposed life-work.

(*p*) How far uniformity of scholastic attainments should be required, and how far prescribed courses of study should be adapted to the intellectual characteristics of individual students.

(*q*) Whether the manual of arms and the simplest principles of tactics should be taught in the common schools, as involving all the substantial benefits now derived from what is known as calisthenics, and giving the students in addition thereto the benefits of superior discipline and decorum, and providing, for the sake of the State, the rudiments of the knowl-

edge necessary to convert the citizen into a soldier for the defense of his country.

(*r*) The importance of a national civil service academy, in which students selected from each representative district throughout the whole country shall be educated and trained for the civil service as such students are now educated for the military and naval service in the military and naval schools.

(*s*) The importance of a scientific education for common soldiers and marines, to the end that when not engaged in military operations they may be employed in scientific observations and explorations under the direction of qualified officers, and to the further end that such soldiers and marines may be saved from the habits of dissipation and vice engendered in idleness.

(*t*) The history, influence, results, condition, and prospects of education in different countries."

We must compare these questions with the existing live questions in Europe, and strike the common ground so that the debates may interest alike the delegates from all nations.

It has been the custom in international educational congresses to publish in advance the questions, and invite written theses to be sent in to the executive committee. From these theses are selected such as are found most suitable to be read and debated at the several sessions of the congress.

There are three great questions, the pivots as it were of all our educational management, and if we can bring out these in our international conference we shall accomplish the best results. These pivotal questions relate to the course of study, the methods of instruction, and moral training or discipline. These are quite properly placed in the foreground in President Bonney's scheme above. The course of study question, for example, involves these practical issues of shortening and enriching the programmes of our common schools: Can we flank a certain amount of higher arithmetic by placing algebra and geometry in our elementary schools? Can we change the work of the college so as to require the study of general history and the rudiments of natural science such as are given in the so-called "natural philosophy" and "physical geography" text-books used in our high schools? Ought the colleges to lower their standards of admission so as to diminish the dangerous hold which secondary schools are getting to have in our national education?

The old question of religious education in connection with the public school is alive yet in this country, and it is very important just now in Germany, where there is a reactionary school law proposed, and in France, where the State is endeavoring to completely secularize the schools; and finally in England, where the parochial schools are strongly contesting the rising influence of the non-sectarian education.

Finally, the general objects of the international congresses are so well set forth by the World's Congress Auxiliary at Chicago that I read from

their circular of last October, wherein they present these objects as themes of the six great classes of congresses :

I. "The grounds of fraternal union in the language, literature, domestic life, religion, science, art, and civil institutions of different peoples.

II. "The economic, industrial, and financial problems of the age.

III. "Educational systems, their advantages and their defects ; and the means by which they may best be adapted to the recent enormous increase in all departments of knowledge.

IV. "The practicability of a common language, for use in the commercial relations of the civilized world.

V. "International copyright, and the laws of intellectual property and commerce.

VI. "Immigration and naturalization laws, and the proper international privileges of alien governments, and their subjects or citizens.

VII. "The most efficient and advisable means of preventing or decreasing pauperism, insanity, and crime ; and of increasing productive ability, prosperity, and virtue throughout the world.

VIII. "International law as a bond of union and a means of mutual protection ; and how it may best be enlarged, perfected, and authoritatively expressed.

IX. "The establishment of the principles of judicial justice as the supreme law of international relations; and the general substitution of arbitration for war, in the settlement of international controversies.

"It is impossible to estimate the advantages that would result from the mere establishment of personal acquaintance and friendly relations among the leaders of the intellectual and moral world, who now for the most part know each other only through the interchange of publications, and, perhaps, the formalities of correspondence.

"And what is transcendently more important, such congresses, convened under circumstances so auspicious, would doubtless surpass all previous efforts to bring about a real fraternity of nations, and unite enlightened people of the whole earth in a general co-operation for the attainment of the great ends for which human society is organized."

Following Dr. Harris, Mr. Lane, of Chicago, made brief remarks.

He said that demands had come in from various learned societies, for opportunity to deliberate upon their work. He said that the committee of which he was a member would co-operate with the National Educational Association, and endeavor to bring all things into harmony with it. He gave account of the opportunities that would be afforded by the Art Institute building and the Auditorium for all meetings that might be held, and said, in conclusion, that while invitations in general had been extended to foreign nations to participate, all special matters belonging to it would be referred to the National Educational Association.

In Memoriam.

DR. JOHN WICKERSHAM, OF PENNSYLVANIA,

Born March 5, 1825,
Died March 25, 1891.

DR. JOHN HANCOCK, OF OHIO,

Born February 18, 1825,
Died June 1, 1891.

DR. THOMAS W. HARVEY, OF OHIO,

Born Dec. 18, 1821,
Died January 20, 1892.

IN MEMORIAM—DR. JOHN WICKERSHAM.

BY DR. EDWARD BROOKS, OF PHILADELPHIA.

It is very gratifying to me that, though through an inadvertence the name of Dr. Wickersham does not appear on our program, he is not forgotten by the members of this Association. It is also gratifying to me to be called upon to speak a few words in his memory, though I should have been better prepared to do justice to the occasion had I known beforehand that this duty would be assigned me.

Dr. Wickersham was Pennsylvania's most distinguished educator. I am sure I do not overstate the matter when I say that he did more for the progress of education in our State than any other man in Pennsylvania. Moreover, I believe that Dr. Wickersham ranks among the greatest educators that this country has produced. His work was deep, broad, and lasting, and his name deserves to be enrolled among America's most eminent educators. His career was one of uninterrupted advancement and success. Every position he occupied was filled with conspicuous ability, and became the stepping-stone of a higher position. He began his educational work as a teacher of a country school, then became the principal of an academy, was then elected county superintendent, then became principal of the first State Normal School of Pennsylvania, and finally crowned his work by being placed at the head of the Department of Public Instruction in the Keystone State. As teacher of the country school he aroused the enthusiasm of his pupils and patrons; as principal of the academy he became known throughout his country as a wise and progressive educator; and as a county superintendent he was one of the most intelligent and distinguished in the State. As principal of the Normal School at Millersville he laid the foundation for normal instruction in Pennsylvania.

The Normal School law of the State was largely shaped by the work of this school, and it became a model after which the other schools of the State were patterned.

Dr. Wickersham's views on education were broad, progressive and philosophical. He was one of the earliest to base pedagogical instruction on philosophical principles, and to claim that teaching could be developed into a science and an art. His lectures to teachers at the beginning of the Millersville Normal School, nearly forty years ago, presented many of the principles which have since been called the "New Education." The basis of this course of instruction was a careful study of the nature of the mind, and this was before any works on educational psychology were

published. So high was his appreciation of the value and responsibility of this work, that these lectures were prepared with the greatest care. No amount of labor seemed too great in order to make them worthy of the attention of his classes of student-teachers. These lectures were subsequently published, forming his two works "School Economy" and "Methods of Instruction," works which were not only extensively read in this country but have been translated into several foreign languages.

In 1866, he resigned his position as principal of the Normal School and was appointed State Superintendent of Public Instruction. In this position Dr. Wickersham showed pre-eminent abilities, and accomplished a great work. He put a life and enthusiasm and dignity into the department that it had never before known. This influence permeated every part of the State and gave a wonderful uplift to the cause of public education. While as State Superintendent his name is not identified with any striking act of legislation, it can be truly affirmed that no one who ever occupied the position did so much for the advancement of the cause of education in Pennsylvania as Dr. Wickersham. Necessary legislation had already been made; what was needed was a strong executive to put the machinery into motion, and Mr. Wickersham was such an executive. The educational atmosphere of the State was filled with the spirit of life and progress. School buildings were improved and multiplied, new normal schools were established, teachers' qualifications were raised, county superintendents were stimulated and strengthened in their work, and there was a grand movement forward all along the line. Upon his resignation from the office of State Superintendent he was appointed Minister to Denmark, a position which was not congenial to his taste and which he resigned after a few months' residence abroad.

Mr. Wickersham was more widely known abroad at one time than any other educator in this country. Many here present will remember the position he occupied at the Centennial Exposition in Philadelphia in 1876, and will corroborate the statement that no American educator attracted wider attention among foreign educators than did Mr. Wickersham. It was my pleasure to renew my acquaintance this summer with M. Buisson, Director of Primary Instruction in Paris, who was at the head of the French Commissioners of Education in this country in 1876, and the first question he asked me, after a few words of personal greeting, was in respect to his old friend, Dr. Wickersham of Pennsylvania. He seemed deeply touched to learn of his death, and spoke in high terms of his writings and his work.

Mr. Wickersham was a distinguished member of the National Educational Association. He was present at its organization in Philadelphia in 1857, was elected President in 1865, and was also President of this department of superintendents. He took great interest in its meetings, was one of its wisest counselors, and his contributions to its literature showed

a clear, vigorous and practical thinker on educational subjects. At the meeting of this Association, one year ago, Mr. Wickersham was present, and the distinguished presiding officer, Judge Draper, seeing him enter the hall and remembering his conspicuous and honorable services as an educator, invited him to a seat upon the president's platform. A few months later and, unexpectedly to himself and his friends, he was suddenly called away. His strong and impulsive heart ceased to beat, and he passed over into the land of silence. But though he is not with us to-day, his memory remains as a rich heritage of lofty purposes and noble achievements, and we honor ourselves as we pause a moment in our exercises to do honor to his deeds and his memory. And it is with great personal gratification that I twine this wreath of grateful memories and lay it on his honored grave.

IN MEMORIAM—THOMAS W. HARVEY.

BY SUPT. L. W. DAY, CLEVELAND, OHIO.

Ohio was one of the first States in the Union to adopt State supervision of public instruction. As early as the year 1837, in obedience to a most earnest appeal made by a semi-state organization of teachers, the legislature passed a law creating the office of State Superintendent of Schools, to which position, on request of the same body of educators, Mr. Samuel Lewis was soon after appointed. It may be worthy of note that within a few weeks after the appointment of Mr. Lewis, Horace Mann, whose memory is venerated by all Ohio teachers, was placed at the head of the Massachusetts schools as Secretary of the State Board of Education.

In Ohio there was some instability, the duties and responsibilities of the office being assumed by the Secretary of State during a portion of the time down to the year 1853. In that year the commissionership of the common schools was made an independent office, and clothed with such authority and power as to give it, at least, a degree of dignity.

Among the men who, under circumstances at once disheartening and discouraging, labored unflinchingly for the elevation of the schools and the cause of education generally in these early days, as well as in the prosperous years that succeeded those dark hours, may be named Samuel Lewis, Lorin Andrews, A. D. Lord, M. F. Cowdery, M. D. Leggett, Horace Mann, Andrew J. Rickoff, I. W. Andrews, W. D. Henkle, Thomas W. Harvey, John Hancock, E. E. White, Anson Smythe, Andrew Freese, John Eaton and many others, each of whom was a hero in the protracted struggle against the powers of ignorance and indifference in our good State. The enthusiasm of these men knew no permanent discouragement.

Strong in the right, powerful in will, determined and united in effort, they conquered a glorious measure of success.

Into the State Teachers' Association, organized in 1848, all the leading educational workers of the State came, bringing with them experience, ability and reputation. The teachers of the State were roused, conventions and institutes were held, the standard of teachers' qualifications was raised, local supervision of schools was urged, public school libraries were established in both town and country, normal schools were urged, methods were discussed, better school buildings were secured, especially in villages, towns and cities—in short, every school interest received its due share of attention with more or less of success. Under the inspiration of this organization and the influence of the army of earnest men and women enrolled as educational workers, the schools steadily forged ahead.

It was to an inheritance thus founded that Mr. Thomas Harvey came, as State Commissioner of Common Schools, in the year 1871. He labored most assiduously to extend, broaden and deepen the work of his predecessors in office and his co-laborers in educational work. He placed great reliance in the efficiency of the Institute, and sought steadily to strengthen and establish firmly the feature of educational effort. Laying aside his official robes at the expiration of his term, he continued his interest in the common schools without abatement of zeal, laboring shoulder to shoulder with his associates in all parts of the State. In step with the wise and determined leaders of thought and effort throughout the nation, he was always found in the storming column in the assaults upon the citadel of ignorance, a stalwart in the fray armed *cap-a-pie* for the fight.

Born among the hills of New Hampshire, he was early imbued with a spirit of self-reliance and independence, which were leading characteristics of his life. An earnest, conscientious boy, he developed into a noble man, broad of view, pure in thought and word, a safe leader, an inspiration to all. His early educational privileges were limited. He availed himself of every opportunity which his vicinity afforded, and at the age of fifteen began the printer's trade in Painesville, Ohio. Later he became a student in the Western Reserve Teachers' Seminary, at Kirtland, Ohio, where he laid the foundation of a broad and liberal education. He was a close student all his life, and although not a graduate of any college he was a thoroughly educated man. Eminently practical, genial and persevering, his work prospered in his hands. He came to the office of School Commissioner fully equipped, and through his writings, his books and his addresses, thoroughly intrenched in the confidence of the teachers and friends of education throughout the State. Upon all appropriate occasions, as a private citizen, a teacher, and a State officer, he spoke earnestly for the normal school, the teachers' institute, for local supervision, for a more comprehensive course of study, and for a higher grade of excellence on the part of teachers. He accomplished much. In the Association of

his own State, on the floor of this department, and in the councils of the National Association his voice was often heard pleading for measures calculated to better the condition of the common schools. His interests were not divided; he pursued no uncertain course. He was not a politician in the offensive use of that term, but he was an educator with decidedly optimistic tendencies. Keenly sensible of the shortcomings of the public system, he nevertheless looked bravely forward to the time when the handicapping of the schools should be, in large measure at least, removed, when the mission of the public school should be more fully appreciated, and when illiteracy, ignorance, superstition and bigotry should be dissolved in the light of moral and intellectual excellence.

To the accomplishment of this desirable end he devoted his life. To us he has left the legacy of a noble character, the example of an unselfish career, the inspiration of a broad, generous, pure Christian gentleman.

IN MEMORIAM—JOHN HANCOCK.

BY W. E. SHELDON, OF BOSTON.

The contemplation and study of the individual characteristics of representative men who have achieved success in educational work furnish material for comparison, contrast and imitation. The character and life of a good man open a field for the student's investigation that will yield him pure and permanent pleasure, and will reveal the elements of true success in life.

John Hancock has left behind him a record of a noble manhood, of an eminent educator, of a highly-cultured gentleman, of a patriotic citizen, and of a sincere Christian. From the dawn of his life to the end of it he illustrated the value of habits of diligent application, of temperate living and of high thinking. In such elements of character lies the secret of his useful life.

Count Hamilton once said of Richelieu that "this man commanded little armies, and little armies did great things." So we would say of Mr. Hancock, that from his early experience in the log school-house, as student and teacher, as superintendent of schools, as a writer and lecturer, and as Commissioner of Education of the great Commonwealth of Ohio, he never neglected the little things that presented themselves in the discharge of his daily duties. He never worked for the mere rewards of well-doing, nor did he despise or refuse the well-earned advancements that came to him from such a course of action.

In reviewing Mr. Hancock's life and work, in every position he held, one cannot fail to be deeply impressed with his methodical habits in all

the details of his life. Every step he took was a logical one. Everything he did was systematized, and this marked characteristic, which was practised and developed from his early youth through his entire career, unquestionably furnishes the key to his remarkable success. We cannot too strongly emphasize the practical benefit that it would be to young men entering upon a life of educational work to read the memoir of Mr. Hancock so well prepared by his life-long friend, W. H. Venable, LL.D., of Cincinnati, Ohio, to which are appended selections from his writings. It will serve to encourage, to stimulate, and to guide them.

The study of his boyhood will quicken our youth to a truer sense of the value of this period as a time for preparation, and open the paths to a realization of their highest and best aspirations. His life confirms the truth of the words of a great writer, who said, "It is no man's business whether he has genius or not; *work he must*, whatever he is, quietly and steadily, and the natural and unforced results of such *work* will be always the things that God meant him to do, and will be his best. . . . If he be a great man he will accomplish great things; if he be a small man he will perform small things."

Mr. Hancock, although a bright young man, could not be regarded as a genius, but his life illustrates the truth that men of good talents, wisely directed, will often advance securely in the way of success, when what is called "*genius*" vainly attempts to scale the rugged heights of the hill of difficulty. Goethe once said, "We are not all born to solve the problem of the universe, but to find out what we have to do, and confine ourselves within the limits of our powers of comprehension," and we may add, of action, also.

Mr. Hancock evidently relished grappling with large questions, for we find that when he was only twenty-three years of age he prepared and read an essay at a teachers' meeting in Clermont County, Ohio, "On the National Association for the Promotion of Education." The mastery of subjects, broad and comprehensive in their scope, made him, unquestionably, the man of influence and power he has ever been in the councils and work of the National Educational Association and its departments.

He joined the Association in 1858 at the meeting held in Cincinnati, where his close friend, Andrew J. Rickoff, was chosen the President. As Director, President, and active member of this body, he had, for a third of a century, held a front rank among the earnest workers of the nation for the promotion of popular education. His prominence was largely due to his earnestness, his attractive methods of speaking, his charming social qualities, and to the purity of his motives. His reports, as Superintendent of Schools in Cincinnati, Dayton and Chillicothe are models, showing a thorough and intelligent knowledge of the varied departments of school administration, and of the best approved methods of instruction. His reports made for the National Council of Education, and his addresses

before County, State, and National associations, all give evidence of a broad and comprehensive study of educational subjects.

The position he took was generally the golden mean between the extreme views held by conservatives in education, who think that the good old methods are always the safest and best, and those advocated by the enthusiastic radicals, who think they have discovered a more royal road to learning, or, to quote the words of Mr. Hancock, "who think they have discovered the true educational philosopher's stone, that will transmute everything it touches into the golden ore of wisdom."

His mind once made up on any question of vital importance, it was not easily changed. His character was of the positive order. Convince him that he was in error, and he knew how to yield gracefully, but no special pleading or sophistry could change his mind when he had studied a subject deliberately and taken a position. To him firmness was an element of power and a means of usefulness.

In his relations with teachers under his supervision, he was a model superintendent.

He recognized the fact that all real instruction must emanate from the *individual teacher*, and always encouraged large freedom in work, looking to results as the test of their efficiency.

His individuality was a distinguishing characteristic, and showed itself in public and private relations. Being largely a self-made man, he had confidence in his opinions. His forceful manner at times might have led the casual observer to think him, to a degree, *intolerant*, but by those who knew him better, no such charge would ever be made. He was often, in the discussions of the National Council of Education, *inquisitive*, and availed himself of his rightful privilege to gain all the light on a question he could, with a view to broaden his knowledge and aid his judgment in arriving at correct conclusions. Even when he was not fully satisfied with the answers he obtained from those differing with him, he respected his opponents' honest opinions.

He won his fame and success by strict integrity and close adherence to right principles of action, and the conscientious discharge of his practical duties. From his purpose to devote his life to educational work he never turned aside. He put great industry into all his work.

His self-reliance and perseverance were shown in every position he held. He loved the right and despised all shades of wrong-doing. I never knew him to become excited and vehement in utterance but once, and that was when he felt called upon to denounce a sham pretense in educational work.

The tenor of his life was earnest, and yet he had ready wit, and his humor gave zest to his conversation. In his educational doctrines he was liberal and progressive, and at the same time he was unwilling to set aside the lessons which experience had taught him. New theories and devices in education were all brought to the test of his deliberate judgment.

Mr. Hancock was a conspicuous member of a remarkable group of good men who have represented the State of Ohio in educational councils and work. Many of them have gone, with him, to their reward. The names of W. D. Henkle, Lorin Andrews, Israel W. Andrews, ex-President Garfield, Anson Smythe, Thomas W. Harvey, Eli T. Tappan, Horace Mann and many others have left behind them the imperishable monuments of good service in the varied walks of educational work.

Of this group remaining in the ranks are Andrew J. Rickoff, E. E. White, John Eaton, B. A. Hinsdale, L. W. Day, and many others. Long may they live to enrich the world by their counsel and work. They all mourn with us the loss of Mr. Hancock as a worker, as a comrade, and as friend and brother. May our reflections upon his life and character strengthen our efforts to maintain the great principles which he so faithfully and courageously defended, and so well illustrated in his life.

REMARKS OF Z. RICHARDS, OF WASHINGTON.

MR. PRESIDENT:

I rise to express my full approval of the interesting and appropriate remarks which have been made in memory of three lamented deceased members of the National Educational Association, viz., J. P. Wickersham, John Hancock and T. W. Harvey. But our friend Sheldon, in his very appropriate reference to these departed friends, as among the original founders of this Association, and in referring to the "only two" of the original members now present, has unintentionally I am sure, forgot to mention our worthy friend, Dr. D. B. Hagar, now present with us, who has the honor of preparing the *first Constitution* of the "National Teacher's Association."

We are happy to know that our kind Heavenly Father has prolonged his useful life, to permit him to be here with us to-day, to join with us in paying our tributes of honor to the memory of a Wickersham, who helped to organize this Association, at its first meeting in Philadelphia, *thirty-five* years ago, and of the noble Hancock, who was among the first to welcome and assist the very few original members at our first anniversary in Cincinnati, in 1858.

In all my connection with the work of this N. E. Association, I am happy to say that the lamented Wickersham, Hancock and Harvey, have been among our best co-workers, and our best friends in this Association.

HISTORY AND LITERATURE IN GRAMMAR GRADES.

BY SUPT. J. H. PHILLIPS, BIRMINGHAM, ALA.

It is not without trepidation that I appear before this Department to discuss so vital and comprehensive a subject as that assigned to me by your president. Fully aware of the fact that I am addressing those who are far better equipped than I for this task, I beg at the outset that what I shall say upon this important topic may be considered tentative and suggestive rather than didactic.

The connection between history and literature is so intimate that the treatment of the latter in its broad sense might include the former, without violence to either. Considering each in its more restricted meaning, however, and particularly in its commonly accepted scholastic sense, the reason for the separation of these subjects in the caption becomes apparent.

In presenting the claims of history and literature to a place in the curriculum of the elementary school, I do not feel that I am advocating the introduction of new subjects into our already too crowded course. History has been assigned a place for many years in the majority of our schools, and literature has received at least a passive recognition. The actual instruction in both has been far from satisfactory; in quantity, it has been for the most part, nominal and uncertain; in method, aimless and desultory. That these subjects have not been—are not now—adequately appreciated by the vast majority of the educational guild of this country, will be readily conceded.

During the past decade, the methods of instruction in nearly all of the other branches of elementary school work have undergone radical changes, and have reached a wide range of development. In the subjects of history and literature, however, it must be admitted that but little if any progress has been made in securing systematic instruction either in matter or method.

In language and arithmetic, we find a careful gradation throughout the course; in every stage of the child's progress, we become conscious of an effort to adapt matter and method to the capabilities of the growing mind, to arouse and develop self-activity by creating an interest in the subject-matter. An extended examination of courses of study in different sections of the United States reveals the fact that in few instances only has there been any serious attempt to apply to history and literature the systematic treatment accorded to other subjects.

The explanation of this fact cannot be found in any inherent difficulties in the subjects themselves. The plaintive question of the venerable Walt Whitman regarding our national literature may have been unconsciously applied by many to our national history, though we should be loth to make the admission. Popular indifference may, perhaps, be partially attributed to the absence in our local and institutional history of the element of antiquity, an element quite necessary to enlist the attention and take hold of the imagination. Until within recent years, our people have been more actively interested in the making, than in the recording, of history. As a people, we are even yet standing far too near the seething caldron of our later history to form a calm dispassionate judgment respecting its character and value. Proper perspective will doubtless enhance our interest, both in American history and American literature.

There is still another cause, deeper lying perhaps, but farther reaching in its results.

The curriculum of the common school is not a mere arbitrary or accidental catalogue of subjects; it is a development, a growth, under influences as potent and as complex as those which have given life and form to our social organism. On the one hand we find those fundamental principles, physiological and psychological, which appertain to the nature and development of mind, those laws of mental action which indicate the relative strength and activity of the several powers at different ages and stages of growth, and dictate the order and methods of training. These factors, so far as understood, within certain limits at least, are definite, universal and invariable, and must constitute the subjective basis of a rational course of study. On the other hand, we encounter objective conditions and requirements, among which may be mentioned the sphere of activity and environment designed for the child, the time and extent of his education, the spirit of the age and the demands of public sentiment as dictated by that spirit. These factors, embodying the popular ideal of education, are variable, and are subject to changes and modifications, sometimes radical and revolutionary, always more or less definite and perceptible.

This elasticity of conditions, due so largely to the genius of our American institutions, is in itself an important factor in the progress and development of our national life, as well as of our educational ideals.

Based upon these primary conditions, we find two distinct lines of educational thought, characterizing the two predominating ideals of the century. The one, emphasizing subjective conditions, subordinates the acquisition of mere knowledge or information to the disciplinary value of the studies pursued; the other makes the utility of the subject-matter the measure of its disciplinary value. The predominating tendency of the former has been the concentration of all the agencies of education to

secure the severe training and exact discipline of the intellectual faculties, leaving the culture of the emotional and executive faculties largely to the accidents of life. Such subjects as were deemed unsuited to intellectual gymnastics, were carefully excluded. History, poetry and music, were laid aside as too trivial and effeminating for men who aspired to intellectual strength. With the rise of the utilitarian ideal, we find in recent years a pronounced tendency towards the opposite extreme. The practical arts as elements in individual and national progress, have demonstrated their marvelous power to such an extent that to-day science is idolized and knowledge is declared omnipotent.

It is not difficult to see that under the sway of these two great educational ideals, history and literature have received but little direct encouragement as branches of school work. Considered by the one inadequate as a means of severe mental training and exact scholarship, and by the other as containing too little promise of immediate utility in the business of life, these subjects have been assigned a subordinate and precarious lodgement in the curriculum of the elementary school.

The tendency has been to relegate the study of literature as such to the high school and the college—to place it as far as possible beyond the reach of the masses. The value of literature as a means of culture may be admitted, but it is claimed to be beyond the comprehension of pupils below the high school. In the meantime, these pupils take their reading into their own hands, and drift away unwarned to the dangerous shallows of sensational and ephemeral literature. When we remember that only about fifteen per cent. of the children in our elementary schools ever reach the high school, it becomes evident that those educational agencies designed to advance the masses and to conserve the highest interest of the state, must be concentrated in the grammar schools. In the millions of youths in these schools to-day are centred the hopes and the interests of the future. The boys from these schools, not those from our high schools and colleges, will roll up the future majorities in our great cities. For many years to come the battle-ground of the republic must be the grammar school, and the instruction here imparted will determine the future battle-cry of American civilization.

It was not without fitness that literature and its allied subjects were called by the ancients the *humanities*. These studies appeal directly to the human element in life, and are calculated to inspire the soul and mold the life more effectively than all the other subjects of our elementary course combined; these are the only studies of the course that are likely to be projected into the child's after-life; they serve to cultivate the affections, to ennoble the emotions and the desires—in short, to purify the springs of human action, and to render secure from pollution the streams of social and national life.

Literature in its comprehensive sense has been defined as the expression

of life ; history relates to the visible form, the outward expression, while literature in poetry and fiction deals with the throbbings of that inner life which animates and beautifies the whole. The interest of both centers in man. History and biography, appealing to individual experience, and exercising the imagination by vivid portrayals of past scenes and incidents, constitute perhaps the surest and most direct avenue to the broader fields of literature. This service of history to literature will be admitted, but not so readily recognized as the connection between the other naturally related subjects of the grammar school course and literature, the supplement and complement of all. It is evident that reading, grammar, history and geography are bound together in a most intimate relationship through the bond of literature. Reading is not *reading*, if it stops satisfied with *word-calling* and a mechanical observation of pauses and inflections. That study of United States history which fails to invest the lives of the noble men and heroic women of the past with an interest all absorbing, and to lead the child to appreciate in their proper setting the eloquent and impassioned outbursts of patriotic sentiment, has fallen miserably short of its mission.

If the long and dreary journey through the desert of language and technical grammar fails to vouchsafe now and then an encouraging glimpse of the promised land of literature, even if it be beyond the Jordan, much time has been wasted, much energy vainly exhausted. As "all roads lead to Rome," so should all the studies in the grammar school lead to the cultivation of the literary sense as the end and sum of all education below the high school.

The study of history and geography might be profitably united throughout the course. While studying the physical and political characteristics of different countries, let the child learn something of the prominent men and notable events associated with them in history. Call to his aid a few of the heroes and noted travellers of history ; let Alexander, Hannibal, or Napoleon, Captain Cook, Livingston, or Stanley do service as guides. Let the progressive map of Italy, Greece, or Germany, as it expands before the pupil, become instinct with the living, glowing millions of the past ; let those horrid wriggling lines be translated by the imagination into remarkable rivers, lakes, and mountains, associated with deeds of valor and renown, and invested with something of the ancient glory of romance. Both in general and American history the child will thus associate place and circumstance in such relation that the one may recall the other. History and geography as studied independently are woefully abused ; in the one, the element of time is unduly emphasized, in the other that of place. It is in their union we must seek strength. If need be, let the geography be rewritten, and let the endless list of insignificant places that have failed in all the centuries to prove interesting to the makers of romance and history, rest silent in deserved obscurity. Winnow, if you will, from

the school history much of dry indigestible detail. Let history and geography be co-ordinated, and the two will move on hand in hand, mutually helpful, mutually inspiring.

But, while much may be accomplished by co-ordinating the more obviously related subjects of the course, and by organizing the instruction in these subjects with reference to literary culture, specific and exclusive attention should be given to history and literature in any well-arranged curriculum.

A brief survey of history-teaching in the grammar grades is all that can be attempted within the limits of this paper. The course in United States history usually covers a period of one or two years. In a few instances we find English history or outlines of general history in the highest grade. Rarely do we find any systematic effort to teach history before the sixth or seventh year of the child's school life.

The increased attention given to this study of late in many of our leading colleges and universities, under the direction of eminent specialists, has revealed three important needs of history-teaching in the grammar school: 1. Better preparation on the part of teachers; 2. Improved methods of teaching; 3. Better gradation of the course in history.

Dr. Thorpe, in an article published in 1887, gives the following vivid description of the prevailing method of instruction in history:

"The teacher assigns a fixed number of pages in the text-book to be memorized; pupils repeat the text in recitation; they are examined in the text, and the subject is dropped, usually willingly. This method prevails in large cities and in crowded schools, and is the *sine qua non* of every teacher who is compelled to hear lessons which he does not understand. The result is that thousands pass from these schools with a brief mental incumbrance of names, dates and isolated events. In some public schools no text-book is used. The teacher not being a special student of history talks text-book on a small scale. The notes of pupils are disconnected statements swept together into a table which is memorized. The recitation is the story after the teacher with unique variations by the child; the text-book abridges the larger work, the teacher abbreviates the text-book, and the child abbreviates the teacher." Dr. Thorpe's conclusion is anything but flattering: "In these schools for elementary instruction, the study of American history as at present conducted is, with few exceptions, time wasted, money wasted, energy wasted, history perverted, and intelligent elementary knowledge of elementary history prevented."

This is doubtless true enough to-day, though the past five years have wrought progress in many schools. The grammar school teacher of to-day, be it remembered, is not a specialist; existent conditions preclude such a possibility. In the majority of our schools, the grammar school teacher is required to give instruction in almost the entire circle of the arts, and is expected to include in her mental equipment the elements of all knowl-

own vernacular, and with no appreciation of the wealth and splendor of the literature within their grasp. Is it not possible that our language teaching is too cold, abstract and technical? that our aims are too verbal and our methods too mechanical? In other words, are we not trying to teach all *about* the language and too little *in* and *of* the language itself? We too often content ourselves, it seems to me, with the method of the dissecting-room: the pupil studies the anatomy of a language that to him is practically dead, so far as its soul-breathing literature is concerned.

Such a process may bring dexterity in the mechanical manipulation of words, but it cannot inspire thought. It may develop skill in analysis, but corresponding power of synthesis and the enlargement of the intellectual life do not of necessity follow.

Far from decrying technical grammar, I hold it indispensable as a means of training in the relation of ideas and in the logical analysis of language. As a science it has its place, but as a science it demands that the pupil shall first come face to face with the living facts upon which it is based—the literature of the language.

Could we turn the light of mature experience upon our early school time, and vividly recall our early views of literature, we should feed our pupils less on the dry, unpalatable husks of thought. What wonder some of us were led to conclude that the masterpieces of Jefferson and Webster, Clay and Calhoun, were written expressly for the big boys to declaim on Friday afternoons; that the fragmentary literature with which the pages of the grammar were so generously sprinkled had been generated for the sole purpose of illustrating rules of syntax? Yet, these "*disjecta membra*" of poet, orator and essayist, constituted the sole literary equipment of the millions who left the district school of the long ago to enter upon life's duties.

But many of us cherish tender memories of the old school reader. The fragments read and memorized in school time may have been enigmas then, but how often since have they flowered into consciousness and power. How often since have we been surprised and delighted to recognize our old familiar friends, when met by chance, no longer isolated nomads, but at home, in the pages of Irving, Wirt or Webster; Dickens, Scott or Bulwer; Wordsworth, Bryant or Longfellow.

But the old school reader has been dethroned; it holds to-day but partial sway in our city and village schools. A literary scrap-book, it may yet serve as a hand-book of elocution, a drill manual in the mechanical process of reading, but it creates no lasting interest in literature, cultivates no taste for continuous reading. Let the reform go on; let the grammar school pupil read with the teacher some of the old masterpieces bequeathed by the children of the past; introduce "Robinson Crusoe," the "Swiss Family" and "Gulliver," Whittier, Longfellow or Tennyson; Irving, Scott or Hawthorne. Begin in the lowest primary with the substitution

more obvious applications utilized, while the philosophy of history in its wider generalizations and applications to social and political science, must be reserved for high school and college.

Time will not permit me to touch upon text-books or specific methods. My effort must be confined to this simple outline of the basis of a course in history as indicated in the development of the historical sense. If the course be thus begun in the primary, the study will prove more fruitful in results, both as a means of mental discipline and as a practical guide in the duties and exigencies of life.

I have dwelt thus at some length upon history, because it is recognized as the doorway to general literature; besides, what has been said with regard to the development of the historical sense, applies with equal force to the development of literary taste, particularly in the primary grades, where the foundation must be securely laid.

DeQuincey classifies literature into two great divisions, the literature of information and the literature of power, or inspiration. The latter now claims our attention. How shall we cultivate in our grammar schools a taste for that class of literature which inspires the soul and ennobles character?

Many plans and devices have been suggested, and tried with varying degrees of success. In many schools the old system of numbered readers has been either supplanted or supplemented by the introduction of continuous selections from our best English and American authors. The celebration of authors' days in many schools has proven an excellent method of impressing upon the mind the character and personality of eminent men of letters, and of familiarizing the children with their works. The spasmodic character, and the celebration feature of this method, however, constitute an artificial stimulus not entirely favorable to the formation of the "reading habit," unless supplemented with more permanent and continuous work.

Another effort, assuming various forms and proportions according to circumstances and local surroundings, may be termed the "library method."

It is not my purpose to examine specifically into the merits of the several methods suggested. Their existence serves to emphasize the conviction that the need of special instruction in literature is most urgent, and is a virtual admission of the fact that the teaching of English in our schools to-day is a failure so far as it concerns the cultivation of literary taste. We give ample time to English in our grammar schools; reading, language, grammar and composition—the related English studies, occupy nearly one-half the child's time in school. Are the results at all commensurate with this vast effort? A very large per centum of our pupils pass through our grammar schools, and even enter our colleges without mastery of the rudiments of language, with no facility of expression in their

substitution of strictly information readers, science readers, the newspaper and manuals of current events—all falsely labeled as literature. If the one emphasizes intellectual gymnastics at the risk of mental starvation, the other may simply tickle the palate with modern sweetmeats, in the name of utility, to the fatal exclusion of wholesome nutriment.

If, on the one hand, there is danger of emphasizing the exclusively disciplinary ideal in the grammar school stage by introducing Latin, algebra and geometry, there is danger on the other of enfeebling the curriculum with a dilute mixture of commercial and industrial branches. The simple terms, "commercial" and "industrial," possess a potent charm to the educational as well as the popular ear, and we must make room for Commercial Book-keeping, Commercial Stenography, Commercial Savings Banks, and even "Commercial German," with "Reciprocity Spanish" doubtless to come in later; we must make room for industrial drawing, the industrial science, and the whole round of "industrial-isms," vaguely accredited to Manual Training. This diversity of instruction may produce versatility, but it is incompatible with intensity. No wonder our common schools are so often charged with the overproduction of moral debility and mental mediocrity, when the curriculum is crowded to the verge of feebleness and teaching energy is so effectually dissipated. No wonder the great educational essentials, the mold of humanity and the glory of civilization, must be abandoned, while we open wide our doors to a throng of modern marvels to convince ourselves of progress.

The gravest danger of our educational system to-day, lies in the effort to make the common school subserve too many specific purposes. The wrecks of the schools of antiquity admonish us against this error. The failure of popular elementary education in ages past has been chiefly due to the effort to subserve some selfish aim, some immediate purpose. Compensation for the neglect of certain powers of the human soul was often sought in the over-education of others; the unique product too often consists of an intellectual giant combined with a moral imbecile, or an intellectual and moral dwarf with massive but unorganized and impotent information.

We need to-day in our common schools the counteracting influence of those studies which will exert a direct power upon the moral conduct of life. Far better omit the rigid drill in advanced arithmetic and technical grammar, if need be, than to send out the millions of youth now in our schools, to assume the duties and responsibilities of life, without the aid to character building obtained from the examples of noble lives recorded in history and biography, without inspiration to noble living drawn from the visions of beauty and moral loveliness presented in literature. It is not enough to teach reading; ability to read is a power that grows more dangerous day by day. This power in the hands of the child, without direction, may be perverted to the basest of uses and prove at the last his

of suitable child literature for the insipid commonplaces and worthless inanities of the average primary reader. Let the literary taste be developed by natural stages from the primary to the high school, and the pupil will leave school having an intimate acquaintance with a few great masters of thought and style, with more exalted views of life, with judgment strengthened, taste cultivated and desire ablaze for truth and beauty. The reading of a few great masterpieces in their integrity, with sole reference to their enjoyment and appreciation as literature, may both precede and accompany verbal drills and grammatical analysis.

True culture does not consist simply in the development of the reasoning faculty or the power of discrimination in the subtleties and trivial niceties of technical learning. The child has sentiments, feelings and emotions; an innate love of the beautiful, the true and the sublime; a yearning for immortality, an impulse to the ideal and the perfect. Shall we emphasize the grosser faculties of the mind and neglect these, the divine part of his nature?

Frederick von Schlegel in his Philosophy of History has the following admirable passage to the point:

"There can be no comprehensive culture of the human mind, no high and harmonious development of its powers and the various faculties of the soul, unless all those deep feelings of life—that mighty productive energy of human nature—the marvelous imagination, be awakened and excited, and by that excitement and exertion attain an expansive, noble and beautiful form. Were the mental culture of any people founded solely on a dead, cold abstract science, to the exclusion of all poetry in action or thought, such a mere mathematical people, with minds thus sharpened and pointed by mathematical discipline, would never possess a rich and various intellectual existence, nor even probably attain to a living science, or a true science of life."

In illustration of this argument, an eminent authority has suggested a comparison of the philological methods of two representative American universities. The high standard of exact scholarship in the one made possible the most critical analysis and laborious research upon a few lines of Horace or Sophocles, while the beauties of thought, sentiment and style were passed with scant attention. Its graduates have been celebrated as exact scholars, and prodigies of intellectual acumen, but they have contributed little to the enrichment of the world's literature. The other imparted a more generous culture of the imagination and the feelings, and gave to the world a Prescott, a Holmes, a Longfellow and a Lowell.

The two dominating educational ideals exist side by side in the modern school, now diverging into extremes, now converging, and uniting through a series of compromises, but seldom fusing in harmonious coalescence.

If the exclusively disciplinary use of the old school reader constitutes one extreme, the other extreme may be seen in the reactionary and unwise

substitution of strictly information readers, science readers, the newspaper and manuals of current events—all falsely labeled as literature. If the one emphasizes intellectual gymnastics at the risk of mental starvation, the other may simply tickle the palate with modern sweetmeats, in the name of utility, to the fatal exclusion of wholesome nutriment.

If, on the one hand, there is danger of emphasizing the exclusively disciplinary ideal in the grammar school stage by introducing Latin, algebra and geometry, there is danger on the other of enfeebling the curriculum with a dilute mixture of commercial and industrial branches. The simple terms, "commercial" and "industrial," possess a potent charm to the educational as well as the popular ear, and we must make room for Commercial Book-keeping, Commercial Stenography, Commercial Savings Banks, and even "Commercial German," with "Reciprocity Spanish" doubtless to come in later; we must make room for industrial drawing, the industrial science, and the whole round of "industrial-isms," vaguely accredited to Manual Training. This diversity of instruction may produce versatility, but it is incompatible with intensity. No wonder our common schools are so often charged with the overproduction of moral debility and mental mediocrity, when the curriculum is crowded to the verge of feebleness and teaching energy is so effectually dissipated. No wonder the great educational essentials, the mold of humanity and the glory of civilization, must be abandoned, while we open wide our doors to a throng of modern marvels to convince ourselves of progress.

The gravest danger of our educational system to-day, lies in the effort to make the common school subserve too many specific purposes. The wrecks of the schools of antiquity admonish us against this error. The failure of popular elementary education in ages past has been chiefly due to the effort to subserve some selfish aim, some immediate purpose. Compensation for the neglect of certain powers of the human soul was often sought in the over-education of others; the unique product too often consists of an intellectual giant combined with a moral imbecile, or an intellectual and moral dwarf with massive but unorganized and impotent information.

We need to-day in our common schools the counteracting influence of those studies which will exert a direct power upon the moral conduct of life. Far better omit the rigid drill in advanced arithmetic and technical grammar, if need be, than to send out the millions of youth now in our schools, to assume the duties and responsibilities of life, without the aid to character building obtained from the examples of noble lives recorded in history and biography, without inspiration to noble living drawn from the visions of beauty and moral loveliness presented in literature. It is not enough to teach reading; ability to read is a power that grows more dangerous day by day. This power in the hands of the child, without direction, may be perverted to the basest of uses and prove at the last his

one soul-destroying instrumentality. Thomas Arnold did not speak unadvisedly when he said, "I would rather that a son of mine believed that the sun went round the earth, than that he should be entirely deficient in knowledge of beauty, of poetry and of moral truth."

It is not enough that the child's mind be prepared by a scientific process to receive truth; the seed must be sown, and the tender shoot must be nourished by sunshine, rain and dew, if we are to expect abundant fruitage in the life.

As the "heirs of all the ages," the youth of America should be impressed with the value of their inheritance, and the solemn responsibility it entails; they should learn the trite but oft forgotten truth, that the past is our only key to the future; that

> "The unerring voice of Time
> Warns us that what hath been, again shall be,
> And the broad beacon-flame
> Of History casts its light
> Upon Futurity."

When the history of American institutions, and the literature of the English tongue in its most inspiring and enduring forms, become fundamental studies in our common schools, then may we hope for the speedy assimilation of the diverse elements now thronging our shores from every clime, into homogeneous American citizenship; then will the priceless inheritance of the past, cherished in the hearts of a grateful and patriotic people, prove an exhaustless well-spring of individual solace and joy, and the substantial guaranty of social purity and national integrity.

(This paper was not discussed.)

SHORTENING AND ENRICHING THE GRAMMAR SCHOOL COURSE.

BY PRESIDENT CHARLES W. ELIOT, HARVARD UNIVERSITY.

THE subject assigned to me is, shortening and enriching the grammar school course.

I. We may properly use the term shortening in either of two senses. In the first place, the number of grades may be reduced from ten to nine and from nine to eight, so that the combined primary and grammar school periods shall end at fourteen or thirteen; or, secondly, the studies of the present course may be reduced in volume or in variety, or in both, so that there shall be room for the introduction of new subjects. I observe that both kinds of shortening have actually been begun in various towns and cities, and I believe that both are desirable, if not universally, at least, in most localities. The argument for the first kind of shortening is a compact and convincing one; averaging the rates of progress of bright children with those of dull children being the great curse of a graded school, it is safer to make the regular programme for eight grades, and lengthen it for the exceptionally slow pupils, than to make it for ten grades and shorten it for the exceptionally quick. In other words, since holding back the capable children is a much greater educational injustice than hurrying the incapable, the programme should be so constructed as to give all possible chances of avoiding the greater evil. Without altering the nominal length of the programme in years, a great shortening of the course can be effected for part of the children, simply by permitting the capable ones to do two years' work in one. I heard a grammar school master testifying a few days ago, in a teachers' meeting, that nearly one-quarter of the pupils in his school (which numbers about 650 children) were successfully accomplishing this double task. Such a statement opens a cheerful vista for one who desires to see the grammar school course both shortened and enriched.

With no more words about the first kind of shortening, I turn to the second kind, namely, the desirable reductions in the volume and variety of the present studies. The first great reduction should, I believe, be made in arithmetic. I find that it is very common in programmes of the grades to allot to arithmetic from one-eighth to one-sixth of the whole school-time for nine or ten years. In many towns and cities two arithmetics are used during these years; a small one of perhaps one hundred pages, followed by a larger one of two or three hundred pages. Now the

small book ordinarily contains all the arithmetic that anybody needs to know; indeed, much more than most of us ever use. Before a body of experts like this it were superfluous to enlarge on this proposition. On grounds of utility, geometry and physics have stronger claims than any part of arithmetic beyond the elements, and for mental training they are also to be preferred. By the contraction of arithmetic, room is made for algebra and geometry. In a few schools these subjects have already been introduced, with or without mention in the official programmes, and they have proved to be interesting and intelligible to American children of from eleven to thirteen years of age, just as they are to European children. Moreover, the attainments of the pupils in arithmetic are not diminished by the introduction of the new studies, but rather increased. The algebraic way of solving a problem is often more intelligible than the arithmetical, and mensuration is easier when founded on a good knowledge of elementary geometry than it is in the lack of that foundation. The three subjects together are vastly more interesting than arithmetic alone pursued through nine consecutive years. Secondly, language studies, including reading, writing, spelling, grammar and literature, occupy from one-third to two-fifths of most grades' programmes. There is ample room here for the introduction of the optional study of a foreign language, ancient or modern, at the fourth or fifth grade. Here it is to be observed that nothing will be lost to English by the introduction of a foreign language. In many schools the subject of grammar still fills too large a place on the programme, although great improvement has taken place in the treatment of this abstruse subject, which is so unsuitable for children. In the Beginner's Latin Book, by Messrs. Collar & Grant, I noticed, five years ago, an excellent description of the amount of knowledge of English grammar needed by a pupil of ten or twelve years of age about to begin Latin. Of course, the pupil who is not to begin Latin needs no more. All the grammar which the learner needed to know before beginning Latin was "the names and functions of the parts of speech in English, and the meanings of the common grammatical terms, such as subject and predicate, case, tense, voice, declension, conjunction, etc." Manuals have now been prepared in considerable variety for imparting this limited amount of grammatical information by examples and practice rather than by rules and precepts, so that the greater part of the time formerly spent on English grammar can now be saved for more profitable uses. Thirdly, geography is now taught chiefly as a memory study from books and flat atlases, and much time is given to committing to memory masses of facts which cannot be retained, and which are of little value if retained. By grouping physical geography with natural history, and political geography with history, and by providing proper apparatus for teaching geography, time can be saved, and yet a place made for much new and interesting geographical instruction. Fourthly, a small saving of time can be made

for useful subjects by striking out the book-keeping, which, in many towns and cities, is found in the last grade. This subject is doubtless included in the grammar school programme, because it is supposed to be of practical value; but I believe it to be the most useless subject in the entire programme, for the reason that the book-keeping taught is a kind of book-keeping never found in any real business establishment. Every large business has in these days its own forms of accounting and book-keeping, which are, for the most part, peculiar to itself. Almost every large firm or corporation has its own method, with printed headings, schedules, bill-heads, invoices, and duplicating order-books, adapted to its own business, and intended to simplify its accounts and reduce to lowest terms the amount of writing necessary to keep them. What a boy or girl can learn at school which will be useful in after-life in keeping books or accounts for any real business is a good hand-writing, and accuracy in adding, subtracting, multiplying and dividing small numbers. It is a positive injury to a boy to give him the impression that he knows something about book-keeping, when he has only learned an unreal system which he will never find used in any actual business. At best, book-keeping is not a science, but only an art based on conventions. As trade and industry have been differentiated in the modern world, book-keeping has been differentiated also, and it is, of course, impossible to teach in school the infinite diversities of practice.

II. I have thus indicated in the briefest manner the reductions which may be conveniently made in some of the present subjects in order to effect a shortening of the present grammar school programme. My next topic is diversifying and enriching it. The most complete statement of the new subjects proposed for the grammar school programme is that made by the Association of Colleges in New England at their meeting at Brown University last November. That association then invited the attention of the public to certain changes in the grammar school programme which it recommended for gradual adoption. These changes are five in number :—The first is the introduction of elementary natural history into the earlier years of the programme, to be taught by demonstrations and practical exercises rather than from books. The term natural history was doubtless intended to include botany, zoölogy, geology and physical geography. Some room for these subjects is already made in most grammar school programmes, and the recommendation of the association refers as much to methods of teaching as to time allotted to the subject. The association recommends that the teaching be demonstrative, and that adequate apparatus be provided for teaching these subjects. There is a lamentable lack of the proper apparatus for teaching geography in the public schools. Indeed, in many schools there is no proper apparatus for teaching geography, or any other natural history subject, to young children. Natural science apparatus has been provided in some

exceptional high schools; but as a rule grammar schools are still destitute in this important respect.

The second recommendation is the introduction of elementary physics into the later years of the programme, to be taught by the laboratory method, and to include exact weighing and measuring by the pupils themselves.

The third and fourth recommendations cover the introduction of algebra and geometry at the age of twelve or thirteen.

The fifth is the offering of opportunity to study French or German or Latin, or any two of these languages, from and after the age of ten.

III. Such are in brief the proposals for shortening and enriching the grammar school course. I want to use the rest of the time allotted to me for discussing the objections to these various changes.

The first objection I take up is the objection to a reduction in the time devoted to arithmetic. Many teachers are shocked at the bare idea of reducing the time given to arithmetic, because they believe that arithmetic affords a peculiarly valuable training, first, in reasoning, and secondly, in precision of thought and accuracy of work. They perceive that the greater part of the school programme calls only for memorizing power, and they think that arithmetic develops reasoning power. The fact is, however, that mathematical reasoning is a peculiar form of logic which has very little application to common life, and no application at all in those great fields of human activity where perfect demonstration is not to be obtained. As a rule, neither the biological nor the moral sciences can make use of mathematical reasoning. Moreover, so far as mathematical reasoning is itself concerned, variety of subject is very useful to the pupils. The substitution of algebra and geometry for part of the arithmetic is a clear gain to the pupil so far as acquaintance with the logic of mathematics goes. Again, practice in thinking with accuracy and working with demonstrable precision can be obtained in algebra, geometry and physics just as well as in arithmetic. It is quite unnecessary to adhere to the lowest and least interesting of these exact subjects in order to secure adequate practice in precision of thought and work.

The second objection is that there are children in the grammar schools who are incapable of pursuing these new subjects. Assuming that this allegation is true of some children, I have to remark, first, that we shall not know till we have tried what proportion of children are incapable of pursuing algebra, geometry, physics, and some foreign language by the time they are fourteen years of age. It is a curious fact that we Americans habitually underestimate the capacity of pupils at almost every stage of education from the primary school through the university; the expectation of attainment for the American child, or for the American college student, is much lower than the expectation of attainment for the European. This error has been very grave in its effects on American educa-

tion all along the line from the primary school through the university, and till within twenty years the effects were nowhere worse than at the college grade. It seems to me probable that the proportion of grammar school children incapable of pursuing geometry, algebra and a foreign language would turn out to be much smaller than we now imagine; but though this proportion should be large, it would not justify the exclusion of all the capable children from opportunities by which they could profit. At the worst this objection can only go to show that it will be necessary to adopt in the grammar schools a flexible instead of a rigid system—some selection or choice of studies instead of a uniform requirement. Those children who are competent to study a foreign language should certainly have the opportunity of doing so at the proper age, that is, not later than ten or eleven years, and those who are competent to begin geometry at twelve and algebra at thirteen should have the chance. If experience shall prove that a considerable proportion of grammar school children are incapable of pursuing the higher studies, that fact will only show that the selection of appropriate studies for children by their teachers should be adopted as a policy by the public grammar school. To discriminate between pupils of different capacity, to select the competent for suitable instruction, and to advance each pupil with appropriate rapidity, will ultimately become, I believe, the most important functions of the public school administrator—those functions in which he or she will be most serviceable to families and to the state.

Another objection to the changes proposed often takes this form—they are said to be aristocratic in tendency. The democratic theory—it is said—implies equality among the children, uniformity of programme, uniform tests for promotion, and no divisions in the same school room according to capacity or merit. I need not say to this audience that these conceptions of true democracy in schools are fallacious and ruinous. Democratic society does not undertake to fly in the face of nature by asserting that all children are equal in capacity, or that all children are alike and should be treated alike. Everybody knows that children are infinitely diverse; that children in the same family even are apt to be very different in disposition, temperament and mental power. Every child is a unique personality. It follows, of course, that uniform programmes and uniform methods of instruction, applied simultaneously to large numbers of children, must be unwise and injurious—an evil always to be struggled against and reformed, so far as the material resources of democratic society will permit. It is for the interest of society, as well as of the individual, that every individual child's peculiar gifts and powers should be developed and trained to the highest degree. Hence, in the public schools of a democracy the aim should be to give the utmost possible amount of individual instruction, to grade according to capacity just as far as the number of teachers and their strength and skill will permit, and

to promote pupils not by battalions, but in the most irregular and individual way possible. A few days ago I heard an assistant superintendent in an important city declare that many grammar school teachers in his city objected to any division among the fifty or more pupils in each room, any division, that is, according to the attainments and powers of the individual pupils. They wanted all the pupils in a given room to be in one grade, to move together like soldiers on parade, and to arrive at examination-day having all performed precisely the same tasks, and made the same progress in the same subjects. If that were a true portrait of the city graded school, it would be safe to predict that the urban public school would before long become nothing but a charity-school for the children of the dependent classes. Intelligent Americans will not subject their children to such a discipline, when they once understand what it means. The country district school, in which among forty or fifty pupils there are always ten or a dozen distinct classes at different stages and advancing at different rates of progress, would remain as the only promising type of the free school. Not only is it no serious objection to the new proposals that they must diminish uniformity in schools—it is their strongest recommendation.

So far from the changes proposed being of aristocratic tendency, they are really essential to a truly democratic school system, for they must be adopted and carried into effect before the children of the poor can obtain equal access with the children of the rich to the best education they are capable of, whatever the grade of that education may be. Accessibility of appropriate opportunity is the essence of democratic society, not equality of gifts, attainments or powers, for that equality is unnatural and impossible, not abundance of inappropriate opportunities, for such abundance is of no avail, but accessibility of such appropriate opportunities as the individual can utilize for his own benefit and that of society. The American grammar school programme now actually prevents an intelligent child from beginning the study of a foreign tongue at the right age. We all know that that age is very early, long before the high school period. It prevents him from beginning the study of algebra and geometry at the right age. It makes it impossible for him to get a chance at the right kind of study of natural science. If a boy is not to go to the high school, he loses that chance forever under our present system. If he is going to the high school, he does not get the chance till much too late. The poor boy in the United States should have as good a chance as the child of a rich man to obtain the best school training which his character and powers fit him to receive. Is not that a fair statement of what democratic society may reasonably aim at, and seek to effect through its own grammar schools? Yet the existing grammar school programme actually prevents the poor boy from getting that chance. The rich man can obtain for his children a suitably varied course of instruction, with much individual teaching, in a private or endowed school, but the immense majority of American chil-

dren are confined to the limited, uniform machine programme of the graded grammar school. A democratic society was never more misled as to its own interest than in supposing such a programme to be for the interest of the masses. The grades for pupils from six to fifteen years of age are an obstruction to the rise through democratic society of the children who ought to rise. Uniformity is the curse of American schools. That any school or college has a uniform product should be regarded as a demonstration of inferiority—of incapacity to meet the legitimate demands of a social order whose fundamental principle is that every career should be opened to talent. Selection of studies for the individual, instruction addressed to the individual, irregular promotion, grading by natural capacity and rapidity of attainment, and diversity of product as regards age and acquisitions must come to characterize the American public school, if it is to answer the purposes of a democratic society.

It is further alleged that the changes proposed are chiefly for the advantage of the well-to-do children whose education is to be carried beyond the grammar school to the high school, and possibly to the college above the high school. They are indeed for the interest of this class of children; but they are much more for the interest of the children who are not going to the high school and for whom, therefore, the grammar school is to provide all the systematic education they will ever receive. The Association of Colleges in New England distinctly says that it makes its recommendations in the interest of the public school system as a whole; "but most of them are offered more particularly in the interest of those children whose education is not to be continued beyond the grammar school." Take, for example, the subject of geometry. It has many and very important applications in the arts and trades. Every mechanic needs some knowledge of it. Its applications are as important as those of arithmetic, if we except the very simplest and commonest arithmetical operations. That the great mass of American children should leave school without ever having touched this subject, except perhaps in arithmetic under the head of mensuration, is a grave public misfortune. To introduce variety into the grammar school programme is in itself likely to profit the children who are never to go to school after they are fourteen years of age, even more than the children who are. A child who is dull in one subject may be bright in a different subject. Thus, a child who has no gift in language may be keen and quick in natural history studies. A child who has no taste for arithmetic may prove unusually strong in geometry. One whose mind is not easily moved through purely mental exercises may be intellectually developed through drawing and manual training. In college we are extremely familiar with these diversities, and the elective system is now giving in most American colleges free play for the profitable exhibition and cultivation of these diverse gifts. In a similar manner the grammar school will be better for even the dull and

slow children, if its studies are made more various and its whole system more flexible.

A fifth objection to the introduction of new subjects is that children are already overworked in school. In an address I gave rather more than a year ago, I pointed out that there are two effective mechanical precautions against the ill-effects attributed to overwork at school—precautions which it is delightful to see are more and more adopted. They are good ventilation, and the systematic use of light gymnastics at regular intervals during school hours. School time ought to be the best managed of all the day from a sanitary point of view, excepting those hours which the children pass out of doors. If the school-room were invariably healthier in every respect than the average home, we should hear less about overwork at school. There is, however, a third precaution against overwork which is quite as important as either of those already mentioned—it is making the school-work interesting to the children. Four years ago I asked the attention of this department of the National Educational Association to the depressing effect which lack of interest and conscious progress in school-work has upon children. To introduce new and higher subjects into the school programme is not necessarily to increase the strain upon the child. If this measure increases the interest and attractiveness of the work and the sense of achievement, it will diminish weariness and the risk of hurtful strain.

Lastly, there is an apprehension lest the introduction of the new subjects recommended should increase existing difficulties with regard to promotion. Parents are sensitive about the promotion of their children. They want the dull ones and the bright to be promoted at the same rate. Their sympathies are quite as apt to be with the slow children as with the quick. I believe that this practical difficulty should be met in part by the abandonment of uniform attainment, or of a standard of required knowledge, as ground of promotion. In Harvard College, where there is no such thing as a uniform programme of study for all students, and where, indeed, there is small chance that any two students out of fourteen hundred and fifty will pursue the same course of studies during their four years of residence, we have long since abandoned uniform attainment as ground of promotion from one class to another. The sole ground of promotion is reasonable fidelity. I venture to believe that this is the true ground of promotion in grammar schools as well, and that by the sole use of this principle in promoting, the difficulty now under consideration would be much alleviated, if not done away with. The right time for advancing a child to the study of a new subject, is the first moment he is capable of comprehending it. All our divisions of the total school period into years, and into primary, grammar, and high schools, are artificial, and in most cases hurtful or hindering to the individual. The whole school life should be one unbroken flow from one fresh interest and one

new delight to another, and the rate of that flow ought to be different for each different child. Economical school administration inevitably interferes somewhat with the desirable continuity and variety of motion; but the most skillful and wisest administration is that which interferes the least.

On reviewing the progress of this reform since I had the honor of discussing the question "Can school programmes be shortened and enriched?" before this Department of Superintendents four years ago, I see many evidences that a great and beneficent change in public school programmes is rapidly advancing. The best evidence is to be found in the keen interest the superintendents and teachers take in the discussion of the subject. Through them the proposed improvements will be wrought out in detail, their influence will be successfully exerted on parents, committees and the public press, and their reward will be, first the daily sight of happier and better trained children, and secondly the elevation of their own profession.

DISCUSSION.

[Reported by Supt. Virgil G. Curtis, New Haven, Conn.]

Supt. Edward Brooks, of Philadelphia: I have listened with great interest and pleasure to the scholarly paper of President Eliot on "Shortening and Enriching the Grammar School Course." Some of his suggestions meet my cordial approval, and he will be pleased to know that they are already in operation in many of the schools of the country. The programme for "eighth grades," as recommended by President Eliot, is very widely adopted in our graded schools. In Philadelphia, pupils enter the primary schools at six years of age and have an eight years' course to complete the grammar schools. Slow pupils often require more than the eight years; very bright pupils are allowed to do it in less time when found capable. The same thing is true of many cities of the country; very few have a ten years' course; so that his recommendation in this respect has already been generally adopted. His suggestion of combining studies has also been adopted in many of our public schools. With primary grades, it is a very common practice to unite geography and history; and with more advanced grades, political and physical geography have usually been taught together for many years. While these methods have actually been adopted in our schools, it is nevertheless gratifying that they are indorsed by so eminent authority as the president of Harvard.

Some of the suggestions of the able paper, however, I cannot agree with, especially those with respect to the introduction of algebra and geometry into our grammar schools. I doubt very much that there is any advantage to be derived from the introduction of algebra into the grammar

school course. To the ordinary citizen in practical life, a knowledge of algebra will be found of little value. No one buys or sells by algebra; and a knowledge of polynomials or the quadratic equation would be of little use to the housewife in the discharge of her duties. Indeed, no one of the mathematical branches would be of so little value in the ordinary practical affairs of life as algebra. Besides, we cannot advocate the study of algebra on account of its disciplinary value, for no mathematical branch gives so little mental discipline that the ordinary business or professional man would find of use to him. As a disciplinary study the elements of algebra will be found to be far inferior to either arithmetic or geometry. Much of algebra is a mere calculus, and the aim of the student is to become expert with the manipulation of symbols—a form of mental operation entirely removed from that of ordinary life. In place of algebra I would urge a more general introduction of *arithmetical analysis,* usually known as mental arithmetic. This form of reasoning, originating with Warren Colburn, is better adapted to sharpen and strengthen the analytical powers of young students than any other branch of the grammar school curriculum. I regard it as far superior to algebra in developing the thought power of the student. It is also generally simpler and shorter in its methods of reasoning and operations than algebra. Take the problem that President Eliot gives: "The sum of two numbers is 24, and one is twice the other." I can obtain the results by the simple process of arithmetical analysis before the algebraist could write his equations. A problem like the following: "If A can do a piece of work in 4 days, and B in 6 days, in what time can both do it?" is much more simply worked by arithmetical analysis than by algebra. And the same is true of a large number of problems. I urge, therefore, in place of algebra, that the beautiful system of arithmetical thought known as mental arithmetic be more fully introduced into our grammar schools than it is to-day.

I do not agree with President Eliot that the study of geometry as a science should be introduced into our grammar schools. Concrete and practical geometry is already taught in most of our grammar schools under the head of drawing and mensuration. In most of these schools the pupils are made familiar with all the ordinary geometrical figures and their properties or principles. These principles include the methods of obtaining the areas of plane surfaces, the area and circumference of the circle, and the surface and volume of the parallelopiped, pyramid, cylinder, cone, and sphere. These principles are obtained not by demonstration, but by concrete illustration; and they are applied by the children until they are familiar with them. This is all that is practicable to do with geometry in the grammar schools. The pupils are not prepared for the logical processes of abstract geometry and cannot understand them. The method of reasoning from axioms and established principles by the logical methods of geometry is too difficult for the ordinary student of the grammar

schools. It is said that abstract geometry with its demonstrations is taught in the public schools of Germany and France; but in my examination, last summer, of the elementary schools of Paris, corresponding to our grammar schools, I did not find a single pupil studying the science of geometry. They apply the principles reached concretely, as we do in most of our grammar schools.

In respect to President Eliot's suggestion that Latin, French, and German should be introduced into our grammar schools, I would say, if I were sending my son or daughter to a grammar school, I should be pleased to have them begin the study of Latin or French at the age of ten; but when I remember that the masses of the people cannot send their children to school after the completion of the grammar grades, I am forced to the conviction that it would be unwise to make these languages a part of the grammar school course.

While the paper of President Eliot is admirable in its intent and statement, yet I am not sure that it expresses precisely what is in the minds of those who are connected with and are practically familiar with the work of our grammar schools. That these schools have not accomplished all that is desired or may reasonably be expected of them, will no doubt be generally admitted; but that their work can be improved by shortening the course of study is, to say the least, a proposition that needs demonstration. That it may be enriched is a most desirable object; though it is a question whether this enrichment may not be attained by other means than the addition to or subtraction from the present course of studies. The broader question, as it presents itself to my own mind, and I believe to the minds of others who are engaged in the management of public school instruction, is, how shall the best results of culture and knowledge be attained in our grammar schools?

This object can be attained in at least two ways. First, by having a correct course of study, neither too long nor too short, and as rich in materials for intellectual, moral, and spiritual culture as is possible. Second, by having well-trained and skillful teachers to use this course of instruction to the best advantage. A few remarks will be offered on each of these two subjects.

I. The course of study as we now find it in the schools of the principal cities of the country is very nearly uniform both in its branches and its scope. It is the result of large experience of wise and thoughtful men who have not only been practical teachers, but many of them careful thinkers on educational subjects. The course generally adopted is, therefore, the product both of philosophy and experience. To say that it is largely defective is to discount the experience and judgment of many of the wisest educators of the country, and to substitute individual theorizing for the results of wise and practical thought and experience.

The course of study for the grammar schools, in use in most of the

cities of the country, includes the following branches: 1. Reading; 2. Writing; 3. Spelling; 4. Language, including grammar and literature; 5. Geography; 6. History and civil government; 7. Arithmetic, including mensuration; 8. Elements of Natural Science; 9. Drawing. To these in some cities are added, singing, gymnastics, and manual training, including sewing and cooking for girls and the use of simple tools for boys.

Now, which of the subjects named shall be omitted for the improvement of the course? What intelligent educator will be willing to drop a single subject from this generally accepted curriculum? Instead of dropping any one of these subjects, I am not sure but one or two could be added, to the improvement of the course. In the elementary schools of Paris, corresponding to our grammar grades, the curriculum embraces, in addition to the subjects named above, instruction in morals and the elements of agriculture and horticulture. The elements of geometry are also named, but this is equivalent to what we include under drawing and mensuration in the American schools.

In my opinion our grammar school course should embrace regular instruction in vocal music, ethics, and manual training—subjects which have not yet been generally introduced into these schools. I think, also, the course of instruction in the elements of literature should be made much more thorough than it is in most of the schools with which I am familiar. I would also introduce regular exercises in "arithmetical analysis," formerly known as "mental arithmetic," which has disappeared from most of our grammar schools, but which, I am pleased to notice, is again entering the schools on its mission of developing the thought powers of the pupil. I would thus enrich the course, not by subtracting from but by adding to it, in branches at least, even if it became necessary to curtail the extent to which these branches are to be taught.

II. The more important factor in this grammar school problem is, in my opinion, the method in which the course of instruction is taught. Indeed, this is the central and vital point of this whole question. If our grammar schools have failed to meet reasonable expectations, it is the fault of the teaching rather than defects in the course of studies. The best course of instruction of which it is possible to conceive will fail in the hands of a poor or indifferent teacher; a superior teacher will accomplish superior results with a very inferior course of instruction. Indeed, the most important element of this great problem of education, either in elementary or advanced education, is the teacher. If a young man comes out of one of our great colleges with no knowledge of literature or mathematics or psychology, and no taste to pursue any of these studies subsequent to graduating, it is not the fault of the course of study, but of the instructors in these branches. They failed to awaken an interest in the mind of the student, and to arouse his ambition and manly

pride to actually master what he was pretending to study. And the same is true in respect to the grammar school and its course; with this added thought, that the average teachers of our grammar schools are fully equal as instructors, I believe superior, to the average teachers in our colleges and universities; and the average graduates of our grammar schools are fully as thorough in the course of their school as the average graduates of our colleges and universities are in the curriculum of their institution. The source of weakness is not in our courses of study, but in our teachers that they are not so well qualified to do the work as they should be.

One of the principal defects in the instruction of our grammar schools—and the limits of this discussion will permit me to refer to but one—is that our teaching fails to arouse the self-activity and mental energies of the pupils. My experience and observation lead me to the conclusion that there is a great lack of intelligent and energetic work on the part of the students of these schools. I cannot, of course, speak for every part of the country, but so far as my observation and knowledge extend, I am compelled to the conclusion that our teachers do not secure that co-operation on the part of the student that is necessary for the best results of culture and scholarship. There seems to be a loss of that ambition and self-reliance and intellectual energy which once characterized the public schools of the country, and which we still find in our rural schools in a more marked degree than in our city grammar schools.

This condition of things seems to be largely due to a misapplication of some of our improved methods of elementary instruction. The methods of teaching little children are not always identical with the best methods of instructing more advanced students. Little children must be led into knowledge; they cannot study and investigate for themselves. There comes a time, however, in the intellectual development of a student when he must learn to rely upon himself for the acquisition of knowledge. This principle has not always been kept in mind in the instruction of the higher grades. The methods of the primary school have been carried up into the grammar schools without that modification necessary to adapt them to the different conditions of a higher intellectual development. In other words, teachers are doing too much of the work and pupils are doing too little of it. There is too much teaching (so called) and not enough studying. The pathway of knowledge is so smoothed and graded by the teacher that too little effort is required on the part of the pupil; and as soon as the way grows a little rugged or thorny, he becomes discouraged and is ready to give up the task. The self-activity of the pupil is ignored, his mental energy undeveloped, his will power weakened, and as a result he acquires the habit of expecting to be helped into knowledge. John Stuart Mill says, "A pupil from whom nothing is ever demanded which he cannot do, never does all he can." I fear that we are not demanding enough from the pupils of our grammar schools. They should be taught

to work, to study, to think, to learn lessons, to tug and sweat at times over difficulties until they master them. We sometimes hear the expression "disagreeable studies," coupled with the suggestion that they should be eliminated from our courses of study; but I do not admit the propriety of the term or the correctness of the suggestion. There are no disagreeable studies; there are only disagreeable teachers and disagreeable methods of instruction.

The interest of most pupils in their studies does not depend upon the nature of the subject *per se*, but rather upon the manner in which the subject is taught and upon the teacher's power to awaken a love for it. A good teacher can make any subject interesting and attractive, and kindle an enthusiasm for what may be regarded as the dryest subject on the list. Pupils should be trained so that they will not shrink from the difficulties of a lesson. "We grow by what we conquer," is a maxim that is too often lost sight of in our modern methods of education. *Labor ipse voluptas* is an old motto which teaches a lesson that should be learned early in life. This defect to which I refer is due to the method of teaching rather than to the course of study; and to correct it we must improve our teachers and our methods of instruction. There should be less explaining on the part of the teacher, less simplification of subjects that need no simplifying, and more real work on the part of the student. There should be more home work in the higher grades than is required in some of the grammar schools of the country. Subjects requiring thought and investigation should be assigned for the pupils to prepare themselves, and then come to the recitation and show the extent of their preparation. Superintendent Day of Cleveland voices a growing sentiment when he says: "In my judgment pupils in the eighth grade would be greatly benefited if they were given a limited amount of home work in order to familiarize them with independent study."

In this connection I desire to say also—though the subject is a delicate one, and one also on which there is an especial liability to be misunderstood—that our higher grammar schools are suffering on account of a preponderance of women teachers. If there is a person in this assembly who feels that he has a right to speak freely on this subject without being misunderstood, it is myself; for my life has been spent in the education of young women, as well as young men, as teachers, and I was one of the earliest to advocate the equal rights of women to an education, and that in the class-room, at least, there should be equal pay for equal labor, regardless of sex. I have been for years a persistent advocate of the opening of our colleges and universities to women on equal terms with young men, believing that I am but forecasting that golden future in which the refining influences of young women shall give added beauty and refinement to even the classic halls of such dignified institutions as Yale and Harvard. Moreover, I believe that women teachers have brought into our schools

elements of taste and refinement that have contributed largely to the advancement of education in the country. I believe that as teachers in lower grades they are superior to men; that in grammar grades they are fully our equals; and as managers or supervisors of our graded schools they have shown equal ability with the other sex.

And yet, as highly as I appreciate their ability and the value of the refining influences which women teachers have brought into our schools, I am constrained to say that in my opinion it would be an advantage to have more men teachers in the higher grades of our grammar schools. In the public schools of Philadelphia, not counting the higher schools, there are over 2,600 women teachers and only 62 men teachers. This large disproportion of male teachers is regarded by those who have been watching our educational work for a number of years as a serious defect in the working of our system. One of the most marked contrasts between the schools of our country and those of Europe is the greater vigor and energy which characterizes the teaching in the latter—a feature mainly due to the preponderance of male teachers. While I would not substitute their system for our own, I am quite sure that we can learn some lessons from them; and one is that we need to increase the number of male teachers in our higher grades.

We need more vigor and energy in our school work. A lack of vigor in teaching leads to a lack of vigor in studying. Effeminacy on the part of the teacher begets effeminacy on the part of the pupil; and we need manly strength as well as womanly grace and refinement in the work of our schools. Especially is this true in the education of the boys of our grammar schools. A manly man can bring to bear upon boys, and on girls also, influences of energy and mental activity and high ambition that most women cannot, no matter how scholarly and accomplished. It is a stimulus to a boy of fourteen or fifteen years of age to come in contact with and feel the touch of a strong, manly character. It arouses a mental energy and gives an ideal of duty and achievement that a woman teacher, with all her excellences of character, is unable to inspire.

In expressing these convictions there is no desire or intention to depreciate or do injustice to women. I look forward to the time when they shall occupy chairs in our higher institutions of learning, from which they are now excluded. I believe that it would add an element of grace and refinement and moral influence to such institutions as Yale and Harvard if some of the chairs could be occupied by women. At the same time it would no doubt be a mistake to have them take all of these chairs, and it is almost an equal mistake to have women teach all the upper grades of our grammar schools. It thus seems to me that the real problem which confronts us in the improvement of our grammar schools is the improvement of our teaching force and the methods of teaching in these schools. Solve that problem, and we shall enrich the work of these schools without

shortening the course of study, and attain to the standard of results that will meet all reasonable expectation.

I quite agree with President Eliot in his judgment of the importance of individualizing the work of pupils as much as possible. Far as we are from a proper standard in this regard, our practice is greatly in advance of that of German schools, which promote by entire classes, with few exceptions in the lower grades, rarely advancing pupils during the school year.

MR. JOHN T. PRINCE, Agent Massachusetts Board of Education: Whether we agree or disagree with the ideas expressed by President Eliot, this department owes a debt of gratitude to him for coming to us with his criticisms of grammar schools, and suggestions for their improvement. As to the proposed modification of the study of arithmetic, geography, and English grammar, many of us will agree, as well as to the general adoption of nature studies and the elements of physics in the grammar schools. Indeed, in all of these particulars, reforms have been made in many places. Much has also been done in English literature by the reading and study of classic authors.

Algebra, it should be remembered, is a science which has to do with principles and abstract reasoning. It has, therefore, no place in the elementary schools. I would not object to the solution of problems in those schools by the use of letters in simple equations. Such work is not properly algebra, and it is a question whether it is really useful. Inventional and constructive geometry, also, may be carried on in connection with the study of form and drawing; but demonstrative geometry involves a kind of reasoning which children of twelve years cannot be expected to carry on. There might well be a differentiation of studies at the end of the sixth year in school, especially in languages which are required for entrance to college; but by far too much is made of the value of learning to *speak* a foreign language in our schools. Certainly we should not greatly modify our programmes and methods for the sake of the very few who may visit foreign countries.

In this discussion we should remember that *power* is the chief end of education, and that depends not so much upon subjects as upon methods. The best way of enriching our work is not to expand the programme, but to have the subjects taught better than they are. Better teachers, and not more subjects, should be the battle-cry of Reform.

SUPT. EUGENE BOUTON, of Bridgeport, Conn., said that while he agreed with President Eliot in several particulars, yet there were some points on which he begged to differ.

It was his experience that only a very small percentage of the pupils in the grammar schools ever reach the college, and he thought the time could be better spent in more practical studies than algebra or foreign languages. For those who were to continue their studies with a view to

obtaining a liberal education, the study of Latin or French might be of great advantage; but for the ordinary boy and girl whose school life ends with the grammar school, he still entertained the opinion that a more thorough knowledge of the English language would be preferable to Latin, French, or algebra.

We doubtless waste valuable time in the lower grades of our public schools. We underestimate the capabilities of children and keep them going over and over things which are not essential. But the grammar school course might better be enriched by changing the dull and soulless routine work in numbered series of readers to the perusal of entire selections from standard authors, by introducing some elementary science work which would cultivate their powers of observation and stimulate the spirit of investigation.

JUDGE DRAPER, of New York, wished to give expression to what he believed was the general feeling of the members of the Department touching the address of President Eliot. While all would not agree with each of the suggestions or propositions of the address, all would agree in thanking Dr. Eliot for giving the matter consideration and presenting his views here. No address at the present meeting would start more healthful discussion and result in greater good than this one. He thought that the general propositions of President Eliot were very nearly right, and that his statements touching the existing conditions in the public school system were mostly justified. It was always difficult to find adequate remedies for existing evils or defects; speakers very commonly presented the evils without presenting the remedies. Dr. Eliot had suggested the remedies. It was a courageous thing to do, and he was entitled to great credit for it, although all of his remedies would not meet with universal approval. Of course, he did not suppose they would.

The Chair called upon President Low, of Columbia, to express his opinion upon the subject under discussion.

PRESIDENT LOW: There is a character in Dickens, who, when asked to express an opinion, turned to his wife, and said: "You know what I think; tell the gentlemen." So, when I am asked to give an opinion on educational matters, I turn to some one of the experts of Columbia and ask them to give an opinion. I came to the presidency of Columbia through the unusual pathway of a mercantile career, then through the broad field of politics. As long as I was a politician I had enough of the characteristics of the craft to imagine I was capable of filling adequately any and every office. Since I entered the field of education I have learned one of the most important things for a man to know—what he does not know. I do believe that along the educational line, from the beginning to the end, from the kindergarten to the greatest stage of life, there is this truth of

unity; education is one in all its parts. The kindergarten and the university are parts of one educational system. I believe and feel I am in my right place, and that I speak the true voice of Columbia, when I welcome you to New York's oldest university.

PRESIDENT ELIOT, in closing, said he was pleased to learn from the gentlemen who had participated in the discussion, that the reform which he advocated had advanced so far, and he only hoped the good work would go on. But he feared some traces of the evil were still left. The school courses lack variety and substance. There is still too much sluggishness in the grammar grades.

He thought if there was any one thing to emphasize in considering this matter, it was that education should not be uniform. There should be more opportunity for the development of individuality.

He spoke again in defense of his assertion as to the relative value of the study of algebra as compared with arithmetic. He agreed with Dr. Brooks as to the lack of efficiency among women teachers, but he attributed it to a different cause. If the women teachers could have the educational advantages that men teachers have, they would prove equally efficient.

Thanking the Department for the consideration which the members had given to his views, President Eliot closed the discussion.

WHAT SHALL THE STATE DO TOWARD THE EDUCATION OF CHILDREN BELOW THE SCHOOL AGE, BETWEEN THE AGES OF THREE AND SIX?

BY SUPERINTENDENT FRANK A. FITZPATRICK, OMAHA, NEB.

THE topic assigned me for discussion will be treated as follows:

First, What can the State do under existing conditions?

Second, What may the State do at present?

Third, What would be the effect of this extension of the school age downward?

Fourth, What are the limits of State interference within the domain of the family?

Fifth, What are the physical impediments in the way?

Sixth, What is the proper method of procedure?

Until comparatively recently the province of government was thought to be merely the protection of the weak; but the exigencies of modern life have impelled the State to reach down into the details of private life, and thus to shape more or less the environments of its citizens. Thus, fire limits are established in cities, inside of which no frame building can be erected; awnings and sheds over the pavements are also prohibited; a citizen may not even build a bay window projecting over the walk in front of his house, and in many cities cannot even make use of the well upon his lot, but must use the water furnished by the city water-works. He may not even build windows overlooking his neighbor's yard; he may not make such a fire in his furnace or heating plant as will throw out unconsumed fuel in the shape of smoke; he may no longer whip his wife, and, in some places, his children; he may not even keep his children at home away from school; he may not carry weapons to protect himself from real or affected dangers; he may not, in Nebraska, make a contract with his laborer to work longer than eight hours in any one day. Instances might be multiplied to illustrate that the modern State has taken under its charge many duties which years ago would have been thought violent usurpation of the rights of citizens.

In the modern world the tendency has been to continually enlarge this power of the State, and correspondingly to encroach upon the sphere of the family on one side, and to trench upon the domain of private enterprise on the other. In the older States compulsory enactments require that what is commonly known as primary, grammar, and high school education shall be provided. In the newer States addition to this is made by giving

permission to citizens to obtain college and university, and, in many instances, even professional education at the expense of the public purse. In Washington, one of the newest States, a proposition appears in the constitution which reads as follows: "The State shall establish common schools, high schools, and a university; but the entire revenue derived from the common school fund and the State tax shall be exclusively applied to the support of the common schools." But that this marks the beginning of a change in public sentiment relative to the extension of a system of public education upward may well be doubted in the prevalence of a well-nigh universal demand that the province of the schools be extended downward, until it includes children of three years of age. Nearly every commonwealth has provided, either in its constitution or by legal enactments, for a system of common schools for the proper education of the children of the State. In all of these States some limitation has been put upon the power of boards of education and municipalities in the direction of restricting the expenditure of public money to the education of a certain class of children; *i. e.*, to that class of children in the community whose ages are directly specified either in the constitution or in some legislative enactment. Thus:

Eleven States limit the expenditure of money to children between the ages of five and twenty-one (5 and 21).

Two States limit the expenditure to children between the ages of six and twenty (6 and 20).

Fourteen States,	between	ages	of	6	and	21.
Five	"	"	"	6	"	18.
Two	"	"	"	4	"	21.
One State		"	"	5	"	18.
One	"	"	"	8	"	16.
One	"	"	"	7	"	21.
One	"	"	"	7	"	20.
One	"	"	"	6	"	17.
Two States		"	"	5	"	20.
One State		"	"	5	"	upward.

To be more specific, public money is expended and explicitly authorized to be used in the States of Oregon and Wisconsin for the education of all children between the ages of 4 and 20; in Maine and Montana, between 4 and 21; in New Hampshire, New York, Virginia, Mississippi, Minnesota, Iowa, Nebraska, Kansas, Idaho, New Mexico, and Washington, between the ages of 5 and 21; in Vermont and Michigan, between 5 and 20; in New Jersey, from 5 to 18; in Rhode Island, from the age of 5 upwards; in Georgia, South Carolina, Arizona, Louisiana, and Nevada, between the ages of 6 and 18; in Kentucky and Missouri, between 6 and 20; in Pennsylvania, Delaware, Maryland, West Virginia, North Carolina, Flor-

ida, Tennessee, Ohio, Indiana, Illinois, Wyoming, Colorado, Arkansas, and California, between the ages of 6 and 21; in Dakota, from 7 to 20; in Alabama, from 7 to 21; in the District of Columbia, from 6 to 17; in Texas, from 8 to 16; while in Massachusetts there is no direct constitutional or legislative prohibition of the use of public money for the education of children of any class, public sentiment seems to have somewhat crystallized in the compulsory school law of that State, which requires the compulsory attendance at school of children between the ages of 6 and 14. In the following named States; Colorado, Wyoming, Montana, Nebraska, Kansas, Iowa, and Missouri, this limitation as to the school age is constitutional. In the remaining States this limitation is simply an enactment of the legislature. I have used the expression "limitation to certain ages" advisedly; for in the only decision of the courts upon this question that has been brought to my notice—that of Roach *vs.* the City of St. Louis—the Supreme Court of Missouri held that within that State, where the school age is fixed by the constitution at from 6 to 20 years, public money could not be used to maintain kindergartens for children who are under six years of age. In consequence of that decision the city of St. Louis was compelled to limit the attendance in the common schools and kindergartens to those children who were between the ages of 6 and 20, instead of admitting them to the kindergarten at the ages of 4 and 5 as was the custom from the time of the starting of the kindergartens in that city in 1875, up to the time when the decision of the Supreme Court was rendered. In the absence of special powers conferred by the constitution or legislature in any particular State, it seems to be the opinion of attorneys that boards of education can be successfully enjoined by any tax-payer from the expenditure of public money for the education of any child below or any child above the limits fixed by the constitution or the legislature of such State; such opinions being in the line of the Missouri decision, as well as decision of courts in other States, denying to boards of education the right to prevent by local regulations the attendance of children upon the school who fall within the limits as to school age defined by the State. Thus, for instance, it has been held by the Supreme Court in a Western State that where a child five years of age in the community, by reason of a statutory enactment, was entitled to be enumerated, and thus to draw public money from the State, any action of the local board limiting the age at which children might be taken into the school to the age of seven was invalid and inoperative. It would seem, therefore, on the basis already formulated, that there is no valid legal objection visible at this distance to prevent the successful establishment of kindergartens in the States of Maine, Montana, Oregon, Wisconsin, New Hampshire, New York, Virginia, Mississippi, Minnesota, Iowa, Nebraska, Kansas, New Mexico, Idaho, Washington, Vermont, Michigan, New Jersey, Rhode Island, and Massachusetts. While in Kentucky, Missouri, Penn-

sylvania, Delaware, Maryland, West Virginia, North Carolina, Florida, Tennessee, Ohio, Indiana, Illinois, Wyoming, Colorado, Arkansas, California, Dakota, Alabama, and Texas, kindergartens, if established, would need to limit the attendance to those pupils who are six years old and upward, at which time children are usually not fitted to profit in the highest degree by kindergarten training.

In spite of the experience of John Stuart Mill, as given in his autobiography, there has been a pretty unanimous consensus of opinion among educators, that the school education of children could not profitably begin before they had attained the age of six; and, while there have been some minor differences of opinion relative to the exact age, there have been as many careful observers who held that seven years was even a better age for the average child to begin his school life, as there have been those who rather timidly expressed the opinion that the child should begin his career at school as early as five years of age. It may well be doubted, had it not been for the work of Froebel, and the consequent developments of the kindergarten as a phase of primary instruction, whether this question of the early attendance of children at school would have, even in this age, any substantial support. It should never be forgotten, however, that the State in its schools always does more than to merely provide for the intellectual training of its children. Every year of school influence should add to the child's power of self-control, because a wise restraint of children always leads to a wise self-control. "And the habits of neatness, regularity, and order that are begun in the tender years of childhood are strengthened by a prolonged effort through the additional time gained by early admission to school."

It is therefore in the interest of the general community that children, especially in the crowded districts of cities whose population is mainly of the poorer people, be admitted to school at the age of five years.

It would not be profitable to enter at this time into any discussion as to the relative value of the differing and diverging opinions held by followers of Froebel as to the best means of adaptation and application of kindergarten principles. While many enthusiastic followers of Froebel at times claim that kindergarten methods are applicable all through the school life of the child, and seek in reality to have the rest of the world change its modes of life and modes of thought, that they may be in harmony with what they hold to be the doctrines of Froebel, the more thoughtful representatives of the new education merely seek to graft the principles of kindergarten instruction upon the school life of the child, that these principles may indirectly modify the present system of instruction. In consequence of this belief, the latter class of kindergartners hold tenaciously to the opinion that there are limits beyond which kindergarten instruction cannot be pushed without damage to the child. Indeed, the results obtained in a Western city after an experience of nearly

twenty years with kindergartens, where children were not admitted at an early age, would seem to leave grave doubts as to the net value of kindergartens, under such limitation, as an element of intellectual growth. Some of the most prominent kindergarten teachers in this country do not hesitate to ascribe the apparent negative results obtained in that city to the fact that children are not admitted to the kindergartens until they have reached the age of six years, after the most modifiable period of a child's life has to a great extent been outgrown, and have, therefore, concluded that the time from the age of six to seven in the life of a child was not suitable to the best and highest kindergarten training. If there be a limit upward beyond which kindergarten training may not be safely pushed, it would seem possible, also, that there is a limit below which kindergarten instruction may not be profitably placed.

The kindergarten philanthropists and amateur kindergartners, whose tender hearts are filled with love for little children, but who have never studied in detail the physiological grounds upon which the kindergarten rests, nor the aims to be reached by the new education, doubtless see no limits below which kindergarten training may not be pushed. To them it seems as if the principles of Froebel, properly applied, would mean a complete regeneration and upbuilding of the race; because it makes it possible, in their view, to substitute for debased and vicious and unwise and careless and shiftless maternal care, the wisest and best and most careful training. In other words, in their eyes it affords the opportunity, possibility, and certainty for giving those children who have not the advantages of educated, cultivated, and refined mothers, a foster-motherhood in the shape of carefully trained teachers in the kindergarten, who are to eradicate the ills that this uncultivated childhood is heir to, and thus, in fact, give every child the same opportunity for development that the more carefully nurtured child of cultivated parents possesses. Like all amateur physicians, they seek to prescribe a remedy for the ills and evils of society without diagnosing the causes which have led to the growth and development of these ills. But to the more thoughtful, their chances of success are not greater than the chances of cure for diseases held out by any of the venders of patent cure-alls.

Indeed, the proposed plan reminds one of that adopted by the Turkish Government in the Middle Ages to develop that famous branch of their military service known as the Janizaries. One child in every five of the Christian population living in the Sultan's dominions was taken away by force from the parents and sent off into a different part of the empire, carefully drilled and trained in all of the elements which seemed to look toward the upbuilding of a perfect physical manhood, and when they reached the age of eighteen they were gathered together in this branch of the military service as soldiers of the Sultan. Their characteristics are known to the world: they were obedient to the state, cold and callous

to the sufferings of others, and as pure children of the state were always ready to do the bidding of their master in the most expeditious and mechanical manner. It would be both interesting and profitable, at this stage of our discussion, to have before us some statement as to the comparative effects upon child-life and child nature, of the substitution of even such an agency as that of a well-regulated and efficient orphan asylum for the training of a less than average home. But no investigator has yet given to the world the results of his investigations into this comparatively unknown region.

History has presented us with some parallels, which, however, are not sufficiently near us to be studied in the proper spirit, nor with much hope of being able to arrive at any satisfactory conclusion. Of course the well-known kindergarten axiom, of return after separation, makes a compensation here for some of these ills, if the child be not too young. Nature has fixed many periods in the early child-life when divorce from the mother means an increased difficulty in raising the child to maturity. Up to an age more or less certain, the child does not feel the need of any companion or playmate, and he is as much the companion of his mother as he was before he acquired the power of self-locomotion.

Any observer of the development of child-life must have noticed the ease with which young children amuse themselves, and the simple devices which chain their attention during this era, when they are growing away from the side of physical union with the mother. At this period, the child not only does not care for other playmates or for the outside world, but resents in an unmistakable manner any attempt to divorce him from his mother, or to take him out of her sight or out of her immediate vicinity. After a time, however, the period arrives when a child longs for other children, and desires more or less definitely to separate himself from his mother, and to go out upon the world which his growing vision sees spread out before him. This epoch marks a more thoughtful period, and the beginning of the era at which kindergarten training should begin. While varying in different children, it is very rare to find this epoch of separation developed before the child reaches the age of four and a half years, and oftener it is at some point between the ages of four and a half and five years of age. Before this age the child has not developed sufficiently on the mental side to make it profitable to begin kindergarten instruction. Therefore, if children are to be gathered into a State school at the early age of three, and until they are four and a half or five years of age, the pattern of school must be after the type of the French maternal or the English infant schools; which schools are radically different from, and indeed subversive of the ideas which lie at the basis of, kindergarten training. For, primarily, the end sought in the maternal and infant schools is the early development in the pupils of these schools of the power to take care of themselves—the teaching of language, let-

ters, and numbers, that the children may be able to acquire knowledge the more rapidly and certainly, during the short interval of time before they must go out upon the world to become bread-winners, than would otherwise fall to their lot if they were kept out of school and on the streets until they reached the age of six; while the kindergarten, on the other hand, seeks to keep the child in the realm of developing ideas, and, therefore, postpones the teaching of the alphabet, and the practical side of school life, until a later time. In fact, the kindergarten, in its development, seeks to provide for the period of infancy by lengthening the time from infancy to maturity, while the infant and maternal schools seek to shorten that time. This will mean, briefly stated, that if the State undertakes the care of children between the ages of three and six, two distinct types of schools will be necessary in order to properly provide for and educate these children.

These infant and maternal schools also presuppose a division of the population into classes, and the existence of a duty on the part of the so-called upper classes to take care of and provide for the children of the lower classes. This tendency makes these schools pauper schools, the support of which, in a free State, must be left to the fostering care of philanthropic private enterprise. As such, therefore, the State should not be called upon to attend to the education of children below the school age, who are between the ages of three and four and a half years.

On the contrary, as the kindergartners propose to enlarge and widen the scope of training for all children of the State, by lengthening the period of infancy, and thus extending the period of growth and usefulness, the State should provide facilities and means for the education of children below the school age, who are between the ages of four and one half and six years.

There are, however, grave difficulties in the way of providing proper facilities for kindergarten training, even after all legislative and constitutional objections have been swept away.

I believe it is a generally conceded fact, by authorities on the kindergarten, that the greatest good derived from kindergarten instruction comes to the children who belong to the poorer and the wealthier classes. In nearly all the addresses and reviews upon this subject, great stress is laid upon this phase of the results of kindergarten training, but usually the authorities are silent as to the benefits to be derived by the children of the great middle class, who more than ever are called upon to bear the increased burdens of taxation.

The development of urban life in this generation seems to have brought forward conditions which point to our large cities as the localities which are especially favorable for kindergarten training. These same large cities, where people live faster and mature quicker, are exactly the places where the training of the kindergarten would have its greatest scope and most favorable results.

By a singular irony, however, these large cities—I mean those cities having a population of 100,000 and upwards—which would be so greatly benefited by the establishment of kindergartens for the education of children below school age, have their resources taxed to the utmost to provide accommodations for the education of children who are, under present regulations, entitled to attend school.

In the large majority of these cities in the West, it is only possible to provide suitable schoolhouses for the shelter of the children of age, by the issue of bonds, and the consequent laying of burdens upon the population that is growing up to care for the necessities of the present. And in one typical Western city, which I have in mind, it is estimated that it will take seven years' time before the school authorities can, with the large means at their command, provide suitable accommodations for the children who are clamoring for admission to school. And if rumor is to be credited, none of the larger Eastern cities are yet able to say that they are ready and able to take care of all the children who are now entitled under the law to demand the benefits of the common schools.

On this side of preparation for the physical necessities of the kindergarten, it may be said that a proper room for kindergarten purposes should be nearly twice as large as the ordinary schoolroom, and that the furniture needed in such a room will cost about as much as that required to equip an ordinary primary schoolroom. From the experience of other cities, it may be assumed that a suitable building for kindergarten purposes may be erected for about $3,000, and that such a building will accommodate sixty pupils—one-half of whom may attend in the morning, and one-half in the afternoon—and that the cost of proper kindergarten instruction is about double that of the instruction now given in primary schools.

This item of expense may be largely reduced if the children are turned over to the tender mercies of inexperienced assistants, who are to get their practical training at the expense of the children placed in their charge. But the experience of localities where this plan has been tried has not been encouraging. The figures given out by the census authorities show, approximately, that to extend the school age down to four and one half years would add about twenty per cent. to the school enrollment, and probably fifteen per cent. to the average daily attendance, and increase running expenses twenty-five per cent.

In almost any one of these cities mentioned, such an increase of expenditure would produce very great complications, and perhaps cause a recurrence to the device which saved the kindergartens in a Western city ; viz., the voting of a reduction of ten per cent. in salaries of teachers who were employed in the primary, grammar, and high schools.

Again, in the effort to establish kindergartens, we always encounter the same old prejudices with which conservatism combats every reform. For

instance, there is probably no one branch in the common-school curriculum, the mastery of which to a greater or less degree offers such increased remuneration to the laborer or artisan, as drawing ; and yet in most school systems it requires constant pressure to prevent the children who would be the most benefited by drawing from dropping the study on account of prejudice against the new departure from both parents and pupils.

It is so with the kindergarten. If entrance to the kindergarten and the primary school is equally free to pupils, fully fifty per cent. will elect to pass by the superior prospective advantages of the kindergarten training, for the more alluring immediate practical information and power given by the primary school.

It is possible that this conservatism on the part of the people arises from the new presentation of an old conflict. The State desires to educate its children in order that they may ultimately be worth more to themselves and indirectly to the State. The parent desires to educate his child in such a way and to such an extent as may the sooner relieve him from the burdens of the child's support, and thus indirectly assist himself in his battle with the world.

The one side reiterates the old statement of the indebtedness of children to parents. The other preaches the new dispensation of the indebtedness of parents and the State to children, who have no voice relative to their entrance into the world, and thus are entitled to the utmost consideration from both parents and the State.

This conflict comes up in many forms in the efforts to enforce the compulsory school law, where at times great suffering results from the forced attendance of young children at school, who are really the only support of a bereaved family. And it came to the surface quite often in England, early in the present century, when, in the laudable efforts of the government to collect the taxes assessed as poor rates, reputable and industrious people were reduced to the condition of paupers by having their belongings seized and sold to support the idle and shiftless who were already in the almshouse.

Fortunately in this age the exemptions from seizure of the implements with which a man gains a livelihood, and the exemption from taxation of a minimum amount of household furniture, have prevented the recurrence of many of these distressing scenes.

And, as it is, this conservatism is really of service to us in our efforts to establish a system of kindergarten instruction, because it largely reduces the prospective immediate demands upon our resources, enabling us to make a beginning with a comparatively small amount of money. This conservatism also materially assists us upon another side. It may be doubted whether a greater calamity could befall the kindergarten than to have each one of twenty large cities begin to equip and maintain a system of kindergartens inadequate for the needs of each of them ; for the reason,

that this would necessitate the employment of a large number of teachers, who are unfitted by nature, and wanting on the side of correct practice and theory. It may well be doubted whether the kindergarten has not already suffered much more in the public estimation from the establishment of kindergartens all over the land, under charge of incompetent teachers, who emphasize the side of games and play, to the exclusion of the "occupations" and "gifts," than from unfriendly critics. Therefore, this conservatism of the people reacting will have a tendency to make it easier to establish kindergartens in a given locality, and thus make it possible to secure competent teachers and better results.

There is another phase of this subject, however, which always has made and always will make difficulty in the way of taking advantage of this conservatism of the people relative to the gradual establishment of kindergartens in any given community. I refer to the efforts and agitation of kindergarten enthusiasts, and people who are alive to the advantages of the kindergarten, toward the locating of kindergartens in their immediate community. This discussion always develops the fact that a board of education, acting for all the people, cannot consistently and legally establish kindergartens for the avowed purpose of improving the instruction given in the schools in such a way as to favor any one class of people or any particular locality, and ignore the wishes of other classes of people and other localities. There is still another phase of the question which may be touched upon here ; viz., that as it is, as I conceive it, the duty of the State to hold fast to the organization of the present primary schools, for the functions therein contained, the problem which will always present itself for solution, is how to harmonize and adapt the kindergarten and the primary school to conserve the best interests of the children who pass through these departments. To this end, the State should carefully guard the interests of the children in the kindergarten, and not delegate the control of such an adjunct to the schools to any separate body or organization, and not allow any supervisor of kindergarten instruction to lose sight of this necessity for so arranging the outcome of instruction that it will fit into the primary school.

Although the development of the kindergarten, both at home and abroad, has been provokingly slow, and indeed discouraging to those who have fought its battles in season and out, there is one redeeming element in the fact that public interest is continually growing in the right direction, and it is significant that there are few educators of the present day who do not see the need, while holding fast to the functions of the primary school, to still further broaden the work of primary education by adding to the analytic side of the primary school the sympathetic side of the kindergarten. To this end it is fitting that kindergartens be established in all communities where the law permits the attendance of children at the age of five years, and where the establishment of such kindergartens

will not interfere with the education of children above that age. In such States as limit the age of children attending school to those above the age of six years, it would seem that kindergartens at public expense are not profitable or feasible. In such States the real friends of kindergartens should confine their attention to the necessary agitation that will secure such modification of existing legislation as will reduce the school age to four and a half or five years.

DISCUSSION.

SUPT. CURTIS, of New Haven, Conn., took the chair, and announced that the next thing in order would be the discussion of Mr. Fitzpatrick's paper.

SUPT. GOVE: I should like to say something, if I could, to prevent what I seem to see before me, a great dispersion of this discussion within the next hour and a half in this way—the presentation of the claims and advantages of kindergarten instruction. If I understand the purposes of the committee and the temper of this paper to which I have just listened, they are to teach us or tell us, who have come up here for that purpose, how certain objects may be accomplished, we accepting and conceding, without time being taken to-day to demonstrate it, that the kindergarten has an existence through the efforts of its first promoters; and that this education is exceedingly desirable, more than desirable, and important; and that we, as superintendents and teachers, desire its introduction and use in every city and State of the country. The paper has shown to us some of the obstacles which are to be surmounted; and now, Mr. President, I trust the Chair will hold those who follow in this discussion to that point of the work, instead of allowing the presentation of the claims of an institution which is so popular, and which has already gained that which it deserves—enthusiastic support and assistance in almost all parts of our land. We are confronted to-day with this problem: Here is something so excellent and desirable, it would seem that we must have it; we need it in our school. How shall we get it? Gentlemen and ladies are here who have it already. It is their duty to tell us how they succeeded in getting it, and how they are progressing with the work. First, the paper presented to us the financial problem. I regard the statutory provisions as unworthy of attention. There is no legislature which can be induced to prevent the efficiency of public education. There is no legislature, from the State of California to the State of Massachusetts, that will not enact laws which will advance the cause of education. That does away with statutory obstacles. According to the statement which the

paper gives in regard to the increase of the enrollment in the schools, if I remember aright, fourteen per cent. of the enrollment in the schools are children five years old, fifteen per cent. are four years old, and eighteen per cent. are three years old. Accepting the proposition that those three years old need not be counted, and that those three and a half years old need not be counted, that makes a material increase, does it not, in the expenditure of the schools? Therefore I conclude that to be the first problem for discussion here. Can we persuade the people to increase, or are they willing to increase, the present school expenditure from fifteen to twenty-five per cent. in order that we may, as we believe, return to them its value by lowering the school age and educating the young people? Can that be done? Now, we read in the press that several cities already have public kindergartens. It is true that what we read most about are the private kindergartens. I have a sort of notion that the only real, good, beautiful, and efficient kindergartens to-day are those private kindergartens which are managed by intelligent administrators backed by the purses of powerful financial friends.

The difficulty of expense being overcome, it would seem that if we should at once proceed with the introduction of the kindergarten, another obstacle would appear in the proposition to furnish to a portion of the people of the city kindergarten schools, while another portion of the people of the same city, and under the same administration, is suffering from lack of adequate school accommodation. If Philadelphia, that we saw a year ago, has founded public kindergarten schools—Mr. McAllister said it had—it is a question with some of us in the far West what defense can be made for providing kindergartens in some wards, and saying to the children in the other ward (there are two hundred and fifty children in it) We will have to give you quite inferior accommodation and inferior teaching. What defense can we make? How did the superintendent and the boards of education take care of themselves on that problem? A third thought has occurred to me, which seems to be, and I believe it is, a greater one than either of the others. To revert, however, for one moment to the last thought. It may have been said, and could have been said two or three years ago, that all enterprises can be begun in a small way; try an experiment with the kindergarten, and show the people how desirable a thing it is. Now the experimental age is past. Every one is satisfied with the desirable things in the kindergarten. Some in our profession are spending their time on this question. It is nonsense, in my mind, to give that part of the discussion a moment's thought. The people are all ready for the kindergarten. But the third great trouble that I refer to is the material to place upon the teachers' platform. Now, in reply to that, the average superintendent of the city is informed that the material for kindergarten instruction is as plentiful as was the material for unskilled instruction fifty years ago. Therefore, as there must be a

beginning to all things, these obstacles that have presented themselves may be, if they have not already been, overcome.. The administration of our schools, we were told yesterday, depended largely upon the teachers. We have been told so a great many thousand times, until we really believe it. The best school that any one of us has seen has had the best teachers. With kindergarten instruction, the number of teachers necessary in order to make the establishment a success must be more largely in proportion to the pupils than the ratio is in the primary and grammar grades. I present to this gathering these thoughts, and trust that the limitation I suggest will be heeded. The most important problem to us now is not the merits of the kindergarten, not the desirability even of giving earlier instruction in the public schools at the public expense, in charge of well-administered public school systems, but how shall the obstacles, as presented in the paper before us, be overcome, that the public kindergarten may be established as a part of our public school system ? [Applause.]

THE CHAIR : Accepting the suggestions of the speaker, you will continue the discussion as to ways and means for the removal of the obstacles.

SUPT. SEAVER, of Boston : I am not on the programme, Mr. President, but I want to say a word. I feel very much as if I wanted to write a paper, and that paper would give to you the history of the introduction of the kindergarten in the city of Boston. We have in that city now 33 of them, containing about 2,000 pupils. In other words, one-third of the children are between three and a half and four and a half years of age. Our limit of age, however, is from three and a half years to five. Now, accepting the limitations which have just been laid down by the last speaker, for I must speak but a moment, I will say there is just one way in which the financial difficulties can be removed, and that is by means of an object lesson long enough continued to convince the people that every dollar that goes into the payment for kindergarten instruction is a dollar better expended than any other dollar in the whole school expense. [Applause.] That practical demonstration by means of an object lesson was given in my city, as is well known, by Mrs. Quincy A. Shaw, whose labors in behalf of the kindergarten are well known, and whose generous purse enabled her to carry out her plans. About fifteen years ago an experimental kindergarten was started in Boston, and it flourished a little, and it dwindled a little, and then it died. But it did not die without a resurrection. [Applause.] Mrs. Shaw took that kindergarten, told the teachers to go on and she would pay them. Then she added another and another, until in the course of ten years she had established in the city sixteen kindergartens, well provided with able teachers whom she had taken pains to have instructed by kindergartners the best the country could produce. These kindergartens were established in the

primary school rooms. Whenever the school board decided to increase the number of school buildings, Mrs. Shaw got a room if she could and established a kindergarten. Then it came to be a serious question whether the school committee should adopt those kindergartens from the date of their establishment in the city and pay the salaries and other expenses. The impression still prevails in parts of the city, where those kindergartens have been established, that they were part of the public school system. I well remember the surprise of some of the members of the Common Council with whom I had interviews, when they were informed that those kindergartens had been supported wholly by private charity and not at all by public money, except so far as the rental of the school-rooms was concerned. They didn't know it. They thought they had been supported by the public school committee for a number of years. When I told them that it was not so, they said there should not be any more difficulty in getting the money for them. I said: "You convince a few more members of the Common Council, and there will be none."

A VOICE: Is that in Boston?

SUPT. SEAVER: Yes, that is in Boston. I grant that it sounds a little like New York. [Applause and laughter.] We want you to come down there and see what they are like. Well, to finish my story, we wanted $20,000 added to our regular school appropriation in order to adopt the kindergarten and pay the expense of the rooms and the material for the children; and although the Common Council thought it was in a narrow financial condition, that $20,000 came as easily as a five dollar bill would come out of Judge Draper's pocket if I were short of money and wanted to get home. There has been no trouble in getting the money since—no difficulty at all.

The kindergarten now is the most popular part of our educational system. The number of kindergartens has increased from 17 to 33. They contain a large number of children, and they are under the instruction of skilled kindergartners—not green girls who are learning the art at the expense of the children, but skilled hands—those who have received instruction for a year and a half in the normal school, and a half year's tuition in the special instruction necessary for the art of kindergartning. Now, an object lesson, if it can be established and maintained long enough, will, I believe, convince the people in any city that the money necessary for the kindergartens should be voted it, whether any other money is voted for school instruction or not. One other point and I am done. Reference was made to the condition of legislation in Massachusetts. We are very fortunate, for we never have had a lower limit for the school age. The statute of Massachusetts provides that every child has the right to attend school in the town or city where he resides. A few years ago a question arose, involving the payment of a large sum of money, upon the meaning of the

word "child" in the statutes. It was concluded that the school age in Massachusetts was from five to fifteen years, and that that should constitute the definition of the word child. It turned out that that is not a limitation—that the school age does not define a child. Then it was contended that the compulsory education age, 8 years to 14, should define a child. It was proved then that that is not the school age. The court finally held that the word child meant any human being from the age of one hour to the age of 21 years, and practically this is the position now, and always has been. Any child, however young, may be admitted into school by the rules established by the school committee of the town. Boston at one time established four years as the proper time for admission into the primary schools. Later it provided that five years should be the limit. Still more lately it has admitted to the kindergarten children as young as three and a half years. There is no legal obstacle in the way, if the school committee should decide to-morrow to admit into school children of the age of one year or one month, to prevent such a thing. There is absolutely no limitation. That construction has been established by a recent decision of the Supreme Court, in a case I could cite if I had access to the books. The first step is to get rid of the constitutional limitation, or rather get rid of the statutory limitation, and admit children of all ages to the schools, which must have the kindergarten in time.

SUPT. SABIN, of Iowa: I see that Miss Harrison, who is the superintendent of the kindergarten college of Chicago, is here. I think it would be well to have her tell us something about the kindergarten.

MISS ELIZABETH HARRISON: I thank you, gentlemen, for the privilege of standing before you to-day. I wanted to make a reply to, or some comments upon, Mr. Fitzpatrick's paper, and although I have not a manuscript, I have brought headings from which I wish to speak. In the first place Mr. Fitzpatrick spoke of the difficulties which might arise in connection with the training of children under three years of age —the early difficulties. It seems to me that we, as educators of the nation, should take more into consideration the education of the mothers of the children. And I know that the influence of the teachers in this direction particularly may have and can have much to do toward making the average mother feel that there is much yet for her to learn. In our own city of Chicago, we have about 2,000 mothers of the educated class studying kindergarten principles as applied to home work. We have this last year started a number of classes in the poorer districts of the city for the mothers of the children that are in the free kindergartens of Chicago. And we find it an enormous help to us. We find it also a great revelation of the earnestness and the interest and the loyal intelligence of the class of women ordinarily known as the char-women of the city. It seems to me

that when this great subject of kindergartens is properly understood, it means the study of human nature and how to develop it so that the mother classes will grow spontaneously; that is, that the kindergarten will have its own class of mothers. The next point which Mr. Fitzpatrick makes, which I heartily indorse, is that the kindergarten class should have but sixty children—thirty at a time—thirty in the morning and thirty in the afternoon. My one fear is that there would be a tendency to crowd too many children into the room. If the children are subdivided into morning and afternoon classes, that will do away with the necessity for two rooms. The rooms you have here in New York and Brooklyn would be sufficiently large for all practical purposes for a kindergarten of thirty children. The third point is that generally there is too high an estimate given, too large an idea of the expense connected with the kindergarten. I have just been informed by Felix Adler of New York, who is thoroughly familiar with the workings of the kindergarten, and who has watched its progress with great interest, that there are 100 children in a private kindergarten and the material used by them during the year costs only $0.50 a year per pupil.

SUPT. POWELL, of Washington: Will the lady permit a question right here? Does the one teacher attend the forenoon and afternoon classes?

MISS HARRISON: That would depend upon that individual teacher's physique. If she was as strong as she ought to be, she should; otherwise she should not. I thank you for your question. I have come here to-day with a very earnest heart and a very burning desire to help one kindergarten, and I beg aid of your State Superintendents in this matter, because our fate rests in your hands largely—not altogether. [Applause.] We are going to have the thing, whether you can help us or not.

The next point Mr. Fitzpatrick touched upon was that concerning the influence of teachers. I would indorse and emphasize that, but I would say, in continuing the matter, that the mother element so strong in the heart of every true woman—that mother element which brings the woman into sympathetic touch with the little child—will do much to obviate difficulties and make atonement for many other defects. In Chicago we require three years' training before we send our young ladies out as fitted for kindergarten instruction.

The next point which I would like to speak upon is that of having special studies for the kindergarten. Any true kindergartner, beginning with the cradle and going to old age, would do what she could to coöperate with the after-life of the school. If there is allowed in the public schools a special superintendent of drawing and music and physical culture, and other things—which I believe is allowed in our schools—why should there not be a special supervisor or superintendent of this very important branch of the educational system known as the kindergarten?

Now my last point is this: I got an impression from Mr. Fitzpatrick's paper, contrary to the impression which I had previously of his belief on the subject. I may be mistaken in my impression; that is, as to the importance of the games and the plays. I understood the paper contended that a great many people could go in and see the children at their games and plays, but when they came to ask the children as to the needs of the occupation and of the materials used they could not answer them. The play circle is the center. The child begins with the passive period—the period of infancy; the receptive period—the period when environment is all-important. I could tell you many, many things which have been called to my attention in connection with the little tots who come into the kindergarten, if I had time. Then comes the creative period, which calls for a spontaneous expression of what is within the child. Then later on comes the school period of the child. The true kindergartner takes the child out of himself. I use that in the broad sense of preparing him for life. If education means anything at all worthy of the life-work at which it aims, it means that process of training by which a human being leads, hereafter, a nobler and a more rational and better life, and which helps him to meet the problem of life better than he could without this education. I think it is proper to speak of this preparatory play. Ralph Waldo Emerson said that in music there were certain things no man hesitated to buy. I think of the kindergarten the same can be said, and I shall quote here in support of that statement the willingness of the Boston school board to spend $20,000 for it. In the play circle the child is trained by his gifts—trained intellectually by the powers of observation, trained by the powers of judging and contrasting the things he sees; his memory and imagination and creative powers are trained, he learns occupation; his love of the beautiful is trained. And then, I say, in the play circle of the kindergarten comes the prominent and all-important element of understanding his or her relationship in life. He is taught to bear and forbear. He is taught his own place among others in life, his significance and insignificance in the world. We not only develop the child's muscles by the plays, and train him concerning the materials he has, but by the actual handling of the materials and his use of them. We begin his training in preparation of what is to follow later, his understanding of them to the relationship to life. We begin with birds and bird life, and the father and mother and the little baby birds, and in a thousand and one ways, by means of songs and stones, and particularly games, in which he imitates these little things, usually captives in a cage, he is gradually led into an understanding of the family relationship. We have a little game called the "birds' nests," in which four or five little bird children may represent the baby birds. Here they are flying off into the air while the mamma bird is training them how to fly. On one occasion I stopped the game. I said: "Alfred, what kind of

a papa bird have you here, I would like to know ? Why are you not helping mamma to teach the babies ?" He turned his head to one side and said : "Why, I got the worms for them." [Laughter.] I do not know whether you think Alfred was in the right.

Yes, I said to him, "But, Alfred, don't you think you ought to help teach the little baby birds to fly ?" The little fellow looked up to me and was not quite sure of my views. So I turned to the class for public opinion and said : "What do you think about this ?" Instantly the whole class decided yes, that he ought to help teach them to fly. Then we had very little trouble with the fathers after that.

I will give you another illustration. Our system believes in coöperation and coeducation, and equality of men and women, but in different spheres and in different ways. Another time we were playing the blacksmith's game. Two little girls were chosen to do their part of the game, and two little boys were to be the blacksmiths. The little boys were pounding on their anvils, and blowing the fire, and attending to the various duties in connection with a blacksmith's shop. One little girl entered heartily into the spirit of the game. The other little girl, dressed in velvet and plush, seated herself off a little way and seemed indifferent. "Why," I said, "Beatrice, I am afraid you won't have any dinner ready when Charles comes home for it." She gave a haughty toss of her head and replied : "My mamma does not cook dinners." The dinner hour came ; the blacksmiths washed their hands and started for their homes. Then I said : "Beatrice has no dinner for the tired and hungry blacksmiths." With that, Charles walked over to the house of the other little girl, where he found a nice dinner awaiting him. The next time Beatrice played she did her part of the household work. [Applause.] Little by little they gain the knowledge of what is to be required of them in the future. The little girl learns what her duty is in the home ; the boy, what is expected in that sort of trade. Later on in the year, we begin to lead these children into the knowledge that the blacksmith's children must have shoes to wear, and the carpenter's children must have bread to eat, and the blacksmith's wife must have clothes to wear, and the blacksmith must have his tools, and so on through all the avenues of trade and necessities for them which have grown up into the world of civilization.

We take the children at different times to the carpenter's shop, the shoe shop, and the tailor shop, so that they can see the men at their work, and come back to the class-rooms and imitate them the better. I shall never forget the lesson a dear little five-year-old girl gave me on one occasion. We brought a scissors-grinder into the room in order that the children might see how he patted his foot, and how he made his wheel go, and what he did in sharpening the knives or scissors. When he had finished sharpening the scissors I paid him his charge, and he was going out of the room, when the little girl looked up into my eyes and said : "Why, you for-

got to thank him, too." [Laughter and applause.] The little girl had been playing scissors-grinder at one time. She had had it indelibly impressed upon her that courtesy, as well as wages, was due. A lesson in the question of capital and labor, which can well be taught the citizens of Brooklyn and New York, is that the laborer is worthy of a courteous word as well as wages earned. [Applause.] I want to say, here is one of the necessities which we cannot afford to do without. Later on in the year these trade activities are connected with advanced life. We have to be served by policemen who will protect the carpenter's home, the blacksmith's shop, the shoe store, and the corner grocery. Then we show what firemen are for, how they put out fires in the homes of the people, and then we get up to where the children learn of the heroes of all nations who have sacrificed home and family and prosperity for the sake and honor of their country; and if you could see, as I have seen, twenty-five, thirty, and forty little ones, calling themselves Swedes and Germans, and nihilists and anarchists, marching in our kindergarten with their swords drawn and their banners flying, and understanding what it all meant, you would think of the importance of State relationship to this matter, and the necessity for this kindergarten education for the little ones three, four, and five years of age. [Applause.] It was this point particularly that I wanted to emphasize.

Later on we come to the universal relationship, or the church relationship. That means the common brotherhood of all mankind, for without that relationship it is not worthy the name. We cannot say with truth "Our Father who art in Heaven" until we can say our brother who is on earth. [Applause.] I have taken more time than I should, but it was with the feeling that if we were to amalgamate this great nation for all that is good and dear to us, for the elevation of the human race in general, I know of no way in which this solid foundation can be cemented together for a higher national life, which begins with the child in its infancy, better than this agency which trains him to realize the different pledges of life, that teaches him that which makes all the difference between the savage and the civilized world. It is for this great realization that we take so long a time to prepare our students for the work of teaching. It seems to me that we should have a supervisor of this department, for not only are the skilled hand and brain and earnest heart required in this work, but philosophic views of life; and I earnestly appeal to you, gentlemen, not to put off the day of considering the subject of the kindergarten as the foundation of the great public school system of America, which is the bulwark of our nation. [Applause.]

SUPT. HUGHES, of Toronto: I have taken much pleasure in listening to Miss Harrison, and I have some hesitation in addressing you after the eloquent exposition which has been given by her of one department of the work, which, in my opinion, proves its value, and of which it is not nec-

essary for me to speak. I also agree with Mr. Fitzpatrick in the feeling that so many people—teachers and others—do look upon the kindergarten as mere play, and do not see in it the grandest agency we can have for widening the views of the children and their relationship to God. Miss Harrison has beautifully and delightfully outlined that. I have always been grateful that St. Louis had Dr. Harris and Miss Blow, and the great city of Boston Mrs. Shaw, because St. Louis might have been ashamed to give up the kindergarten. But in Boston they watched it for years and years and nursed it for years, and I have been told by others that Superintendent Seaver studied the subject very carefully before recommending it for adoption. In Toronto we adopted it in a different way from any of you. I asked Mrs. Kraus, in 1876, to send me the best kindergartner she could. She promised to do so. She sent one eleven years ago, when we decided to introduce kindergarten in Toronto as a part of the public school system. The superintendent of schools there needed a wife, soon after that time, and he married her—kindergarten has flourished there since without any expense to the public [applause and laughter], as extra salary for supervising it. I thoroughly agree with Miss Harrison that we ought to have a supervisor of that department—not that she should manage it or make it separate or distinct from the public school system, but because we need a woman of thorough training to take charge of that work.

I know that Toronto heartily and willingly pays the money needed for its kindergarten. If any part of our public school system was to be departed from, the kindergarten would not be the first, by any means. I tell you what people in Toronto will say to you when you get there—go into the kindergarten instead of the primary classes. We have 27 public kindergartens in Toronto, with 116 kindergartners employed. We have forenoon and afternoon classes. We employ three ladies for our forenoon work. We use the same rooms for the afternoon classes. We put those children in the hands of a primary teacher, who thus bridges over the life of the child until it has passed into the more advanced stage. The advanced class is in the afternoon. We have seen pupils in the primary class preparing for the full day's work in the primary schools. We have no trouble in the afternoon, as all the children have passed through the kindergarten. None attend or go to the kindergarten who are under four years of age. The kindergarten is a part of our organic public school system. When we introduced the kindergarten in Toronto, we felt the lack of good, thoroughly trained teachers. We have now in Toronto 116 ladies who have been trained, who have taken two years or more of study in our work. You did not wait to start your public schools until you had thoroughly trained and competent teachers. You took the best you could get. The teachers of our department have taken two lessons a week in connection with their work up to the present time.

In the matter of expense we have a good illustration. In the 17 years' experience I have had, we have increased the number of our teachers from 67 to 563, showing a very rapid increase of public school buildings and increased expenditure for education. We have continued introducing the kindergarten system, until now we have 27 kindergarten schools in a flourishing condition. This shows that the people of Toronto are willing at all times to build schoolhouses to keep up with the increase in population, and also to bear the additional expense of the kindergarten. I do not agree with the suggestion that the poor children need kindergarten instruction most. I think they all need it, the wealthy children even more, if anything, than the poor children. The poor children get experience that is not to be had in the homes of the wealthy. The rich children never fall but some one picks them up. They never wish but that wish is gratified. They never cry for food but that they receive it. They are petted and loved and spoiled. In the poor man's home the child learns to take care of himself, and gets experience that will benefit him in after life. But I contend that the middle class needs the kindergarten training also. They have a right to it. Therefore I believe we should have it as part of our public school system.

SUPT. POWELL, of Washington: In reference to the financial question, do the pupils progress any better, because of this kindergarten training, after they enter the so-called primary schools? Is the financial expenditure for the kindergartens fully compensated in after life?

SUPT. HUGHES: I think so. They leave school at the age of fourteen years with greater power to do their work than if they had not had this training. They are more intelligent, and have a wider range of general worldly knowledge. Now, as to the cost: the entire cost is a little under nine dollars and fifty cents per pupil for the kindergarten a year, not including the first provision for room furniture and permanent material. The expense of the ordinary material used for the children is very trifling. I think the New York experience would be about our own.

SUPT. W. H. MAXWELL, of Brooklyn: Are your kindergartens in separate buildings, or are they part and parcel of the primary or elementary classes?

SUPT. HUGHES: They are in the same buildings as the other classes.

SUPT. MAXWELL: Are they in any respect under the control or direction of the principal of the primary or elementary schools?

SUPT. HUGHES: In all respects of enrollment and management they are under the control and the management of the principals of the schools.

The supervisor, or one in charge of that branch of the educational system, makes reports the same as the other teachers do. But in the matter of instruction, as to the methods or ideas concerning that kindergarten teaching, we have no man or woman in Toronto that I would allow to interfere in the slightest degree with it.

SUPT. MAXWELL: You have not tried the experiment of having the classes in separate buildings?

SUPT. HUGHES: We have not tried it. It would be more expensive, and, personally, I see no object in it of a beneficial nature.

DR. RICKOFF: May I ask if you had pupils over six years of age, and whether the kindergarten is suited to children over six years of age?

SUPT. HUGHES: From four to six and a half years are the ages within which we give kindergarten instruction. We found with children six and a half years of age, that, when they have been in the kindergarten for a while, they play these games without any apparent consciousness of them; but if they have been in the kindergarten from the start, they do not reach that age at which participation in these games is without good results.

SUPT. TREUDLEY: Did you make a limitation as to the attendance at the kindergarten?

SUPT. HUGHES: We tried to. I was trying to ascertain the expense of the teachers' salaries. I found that the expense did not increase so much with the kindergarten.

SUPT. TREUDLEY: If you came over to this country you would find that the expense of the kindergarten would necessarily increase.

SUPT. HUGHES: Well, we have no McKinley bill. [Laughter.] After ten years' experience with the kindergarten, we have not had one attack from any member of the Rate-payers' Association in Toronto, and we have one of the meanest rate-payers' associations in the country. I say we have not had one complaint from the Rate-payers' Association about the money we have spent for kindergarten purposes. In every district of the city they are continually in advance of us, and asking for more. During the present year we shall open two more kindergartens. The people are satisfied to pay the money; the teachers are satisfied that the pupils are very much better than they used to be when they did not have the kindergarten. I heartily recommend it to you. You should have it. Get it in any way you can. [Applause.]

SUPT. W. N. HAILMANN, of La Porte, Ind.: There are probably many in my condition, that need conversion, and need an official assertion of

the value of the kindergarten. As there may be many in this land who need conversion and strengthening with reference to the matter of the establishment of the kindergarten in the school system, I would ask this body of teachers and superintendents who, by their expression, have announced their convictions that the kindergarten is desirable, that they should say so, and say why it is chiefly desirable. I have formulated this resolution on the ground of the critical statement made by Mr. Fitzpatrick:

Resolved, That the kindergarten, as a means to give to the nascent social tendencies of children direction toward benevolence and civic efficiency, is a necessary part of a complete system of schools.

SUPT. DRAPER: In my six years' experience at the head of the State Board of Education, I was in a position to see and notice the kindergarten, ascertain what is the practicability of this work, and even more, the necessity of it as a component part of our public school work. There are two or three things that it seems to me can be guarded against.

Supt. Gove renders a service to the department and to the cause when he brings us face to face with existing conditions and exact circumstances. We cannot go to the public and secure appropriations—large appropriations—necessary for adding this work to our public school system, of making this department a branch of our public school work, unless we can clearly show to the taxpayers and to the public its practicability, its utility, and its necessity. It must be allied with every public school if it is to be undertaken at all, and it must be closely related to the public school because its influence must permeate every department of the public school work. The manner in which kindergartners perform their work must influence others. The work of the kindergarten must be carried through the higher departments as well. [Applause.] There is great danger of doing this thing half way. There is the greatest danger in compromising this matter. My light on the subject leads me to say that one of the saddest things that I know of, in connection with our public school work, is bringing little children, from three to six years of age, into a public school and not caring for them through the agency of a tried and experienced kindergartner who thoroughly understands the system. The worst thing any city or State can do is to undertake this thing only half way. It must rest on a scientific basis or it will fail. If it rests on a scientific basis, it will accomplish its purpose, it will make headway, it will bring conviction to the minds of all who are related to the educational system.

Supt. Powell, of Washington, struck the nail on the head when he said there were offsets to the expense of this work. I am not at all certain but that the kindergarten is an economical instead of an expensive addition to our public school system. I am sure that the average child who goes through the kindergarten will be at twelve years of age better educated,

more intelligent, and a better child in every respect, than is the average child at fifteen years who does not go through the kindergarten. [Applause.] I know that that child will be more kind-hearted, more in sympathy with nature, more in love with his or her fellow beings, a better citizen, and a stronger man or woman at the age of twenty-one—the average child, I mean—than it is possible for the average child to be without this work. I believe that the kindergarten work is perfectly practical, and it will produce better results than any other department. Indeed, I am ready to say, if it were a choice between the kindergarten and the high school, as to which of those branches of instruction should go, I say the high school ought to go and the kindergarten should be adopted. [Applause.] I think it is true. There is no nonsense about it. I believe that just as much as I believe anything, because I believe in the vim and push and vigor of the American boy and the American girl who have started right and have a chance. [Applause.] I believe any boy or girl who is started right and deserves a high-school education ought to get it. If he has not got vim and push and vigor, he is just as well off if he does not get it at all. I do insist upon it that we who are interested in this subject shall see to it that it is properly presented to the public, and particularly to the officers charged with the responsibility of appropriation. I will ask for one thing and then I will sit down. You have got to counteract the impression that the kindergarten is a public charity. It has started very unfortunately in this country. It is not for the common children alone or the children of the very poor. It is for all the children. Impress that upon the public, and demand that the kindergarten be speedily made a part of your public school system.

SUPT. GREENWOOD: I ask for the reading of the resolution again.

The resolution was read.

SUPT. MAXWELL: This resolution is in effect that the kindergarten should be made part and parcel of our public school system, and I therefore move that it be referred to the Committee on Resolutions.

COM. HARRIS: I hoped that we should have an opportunity to say something on this subject. We have not considered the matter of the expense, and a comparison of the kindergarten in connection with the education given in the high school. The kindergarten in that practical phase, as it presents itself to the superintendent of the school, has not been touched upon except in an indirect way. There is a reason for the kindergarten, and indeed a reason for fault-finding on the part of the Taxpayers' League. The superintendent has his opinion of its value; the taxpayer has his eye on the expense. A debate on that subject, I think, would do more for the kindergarten than anything else we can do in any way.

SUPT. MAXWELL: If the chair will allow me, I beg to withdraw my motion, for the present, to refer to the Committee on Resolutions.

COM. HARRIS: Taking the sense of this resolution, that the height of education is something that cannot be measured as arithmetic or grammar, I think if that resolution was worded a little differently it would put the kindergarten on its proper basis. And, coming back to the question of the cost, I would like to ask Supt. Hughes to tell me what it costs for the primary children. The cost for the kindergartens, I understood him to say, was about nine dollars.

SUPT. HUGHES: A little over twelve dollars, I should say.

COM. HARRIS: In Boston that point was not brought out.

SUPT. SEAVER: I am unable to give you exact figures as to the *per capita* expense. There is not very much difference, though, between the primary and the kindergarten. The salary is four hundred and fifty dollars in progressive stages.

COM. HARRIS: I agree with the writer of the paper in the fact that the age limit is the value of the kindergarten. I think when a child is seven years of age that kindergarten instruction is not particularly valuable. The most important age is from five to six years, after the child has completed his fifth year and not reached his seventh year, I might say. The first practical difficulty in introducing the kindergarten is that one of expense. In the city schools, if it is so managed that the expense per year for the education of the child in the kindergarten is as much as it is in the high school, it is a very valid objection to the development of the kindergarten. Therefore, it is a very important question as to how to manage it so as to get the kindergarten, and get it in a cheap way. I want to contrast the method in Boston and Toronto, and St. Louis and Minneapolis. The method in Boston has been that the noblest and wealthiest people there have pleaded for the kindergarten. Boston is the second city in the United States in point of wealth, and hence the question of expense is a very small matter to the Boston taxpayer. That, therefore, has never been an important matter with them. When I first saw the kindergarten, I saw it in the Boston public school. Mr. Philbrick had gone there. The whole object of that introduction was to show that the introduction could not be made. The teacher had twelve pupils, and the expense amounted from fifty to sixty dollars a year per pupil.

A VOICE: It amounted to more than the expense *per capita* in the high school.

COM. HARRIS: So, when the kindergartners came to mein St. Louis and said they wanted it, I heard their reasons. The kindergarten did not take much hold of me. They said they wanted to utilize play. I said it could not be a very wise man who merely wanted to use play. I said you have got to show how this play does something in building up intellectual character in general. On observing the kindergarten and its work, I thought I discovered that the kindergarten of St. Louis, instead of commencing with play, took the child at the transition period. It takes him through the symbolical stage of its work. It is just as important a part of education as any. We found in St. Louis that the children who began at four and five years of age in the primary schools were not as progressive as those who had been one year in the kindergarten, and, what is more, that the children who come in at seven years of age would have less asserted development. The kindergarten certainly brought the child out in a healthy state of mind, and in a proper receptive condition for what comes afterward. His growth was looked at in a proper manner. Now comes the financial experiment. First, we had large, heavy tables filling up the room. These could not be moved when we wanted to clear the floor for the games. We had forty children, and we had to have another room for these games. That was two rooms that were taken away from the primary schools. That, of course, caused the school boards, who were looking to the matter of expense, and the question of building more schools to provide for two or three thousand children a year, to shake their heads. We had one very well paid teacher and director, a paid assistant, and three or four voluntary assistants. It takes a great many teachers for one hundred pupils. Perhaps in a primary school a teacher can manage eighty of those pupils, whereas in the high school a teacher can manage about thirty, while in the kindergarten she can manage twelve, or perhaps twenty. We fixed our limit at twenty for each teacher. It became obvious that the kindergarten must hunt up some other form of management —of school management—and we discovered it in the Lancasterian system. We called it the semi-Lancasterian system, in St. Louis, because one of our teachers for the kindergarten was from our normal school. We had one very excellent teacher, one who had served for some years, and others who were coming to a realization of the demands of kindergarten work through their apprenticeship. We found by paying one good salary, and a smaller salary to the assistants, that we could reduce the price and the cost of the tuition, and get it below the price and the cost, to the taxpayers, of the primary school. We cut it down, I think, to five dollars and forty cents on the total annual expense *per capita;* and I think another year we cut it down to something a little less than four dollars. That, of course, was so small a price for tuition, that the kindergarten had solved the problem of expense, and we had no trouble as to the semi-Lancasterian plan. That is to be recommended, for some condi-

tions. I do not think any city can successfully introduce the kindergarten unless it looks out for the method.

We found that the ordinary thirty by thirty-two room is not a proper size for the kindergarten. You need a larger room. We made the building sixty feet long, and we put into the room, instead of seventy-five pupils, as you have in Toronto, one hundred and fifty pupils, and these were altogether the best kindergartens we had, in every respect. We had a splendid teacher at the head of them; we had a paid assistant in them, and then we had volunteers. That is where we got the cheapness of our rooms. Then you can have the place wherein these wonderful symbolical games and plays are brought with their tremendous spiritual effect on these children. They are the best as to the matter of expense. With regard to forenoon and afternoon classes for the kindergarten, they said we could not get children to come in the afternoon. The very first week when we took an expression of opinion from the parents on the subject, we found that there were more who preferred the afternoon kindergarten to the forenoon kindergarten. And we found a good many strong and enthusiastic kindergartners who were not only able and competent, but willing and anxious to manage both. We paid them, if they only taught one session of the day, four dollars; if they taught both, we paid them seven dollars. That was a high salary for us for that kind of work.

I cannot sit through this debate without saying that it is a very important matter for this body of school superintendents, who seem to be afraid of the Taxpayers' League—consisting generally of the people who do not pay taxes, but wish they could, and wish to get political favor—to take a stand. Those Taxpayers' League people were the ones who gave the kindergarten a heavy blow in St. Louis. It was a terrible blow, because it brought the kindergarten up to where the argument was made that the instruction was not as valuable as it had been represented, and the expense was enormous, and the Taxpayers' League was harping on that subject all the time. Fortunately for us, the wealthy people were mostly all in favor of the kindergarten instruction, and when the Taxpayers' League tried to drive this kindergarten to the wall, I said to the wealthy people who were truly in favor of the kindergarten: "You get up a Kindergarten League and you will make those people so ashamed of themselves that they won't look at you on the street." It was started, and they did shame those Taxpayers' League people so that they hung their heads. It only remains now to make a change in the constitution of the State of Missouri, and allow cities of a certain size to look after the education of the children under the constitutional age.

SUPT. GOVE: I should like to ask you, if the semi-Lancasterian system were enforced, would it not conflict with the proposition of Supt. Draper and Miss Harrison, of Chicago, who believe also that it would be better not

to undertake kindergarten work at all, unless we can do it well without the assistance of the Lancasterian system?

COM. HARRIS: I say, if you are going to have a kindergarten, you should have that kind. You cannot get one that is adapted to carry out the ideas of kindergarten instruction as well. The philosophy in it is better than in any other. I am supporting the resolution when I speak. I say to this group of learned superintendents that thirty thousand dollars spent for the kindergarten instruction, even if the children do not show any advancement in the way of knowledge when they finish their course, if it tells in the future when they get into the other classes,—I say that thirty thousand dollars has been well spent, and there is a great benefit derived from it.

A VOICE: Do you agree with the statement that the private kindergartens are the only good ones? Are not the semi-Lancasterian ones better?

COM. HARRIS: Yes. The existence of those kindergartens in St. Louis is due to cultivation, earnest work, and the organization of little mother classes which later united for a great social influence. The kindergarten benefits the young woman in the schools. When she is just out of the high school, she goes to the kindergarten and acts as an unpaid assistant for six months or a year. That is one of the most important parts of her education. [Applause.] The kindergarten gives her an excellent opportunity for education that will serve her well in later years, in the way of seeing how to manage children and working with them in the kindergarten. It furnishes a perpetual influence for literature and art, and everything that will redound to the benefit of the masses of humanity. Then the children themselves get this social training so impressed upon them that it never leaves them. They take the children from the slums in some cases and have the kindergartens in the street. Mr. Fitzpatrick remembers a school in St. Louis where the children had to sit on the curb-stone of the street. But the school was established. It took the children young, made them socially clean and self-respecting, and developed them in all the essential things which are the basis of the kindergarten. Then we educated the parents of these children through what we taught them. Parents are never so much affected as when they see their little ones learning things that will prove useful to them in after life.

SUPT. TREUDLEY: Where the population is from 10,000 to 15,000; where the statutory law limits the levy; where that levy is made, and the full amount has been used, and you have been pressed into debt to meet the necessities of the school—now, suppose you get back to a place like that, what would you do?

COM. HARRIS: I would begin by establishing the kindergarten.

SUPT. TREUDLEY: Suppose you did not have enough money to do it, how would you get the money?

COM. HARRIS: If you propose to do it by cutting down salaries, you will be unpopular with your teachers. You say, we will have our salaries lowered, and that is equivalent to inviting the opposition of the teachers to the establishment of the kindergarten. I hold that by making the schools strong in the community you can make that community pay for those schools. The greatest pride of my life, in St. Louis, was in making the city pay for those kindergarten schools. My main point is to make your schools so strong in your community that the people will be bound to support them in anything within reason. Make the parents believe in the schools as the strongest instrumentality for accomplishing good and giving beneficial results in the city. The difficulty in St. Louis, we could have settled in a minute. The people of St. Louis could have voted more money at any time if they had been prepared for the kindergarten as they should have been years before it was introduced. I say, if you are pinched for money, make your schools so strong and valuable in your community that you will compel the people of that community to support them, and generously support them.

SUPT. FITZPATRICK: There are one or two things that I want to say with reference to the resolution that has been introduced here. I would caution the superintendents here against the plan which Dr. Harris has outlined. I do not know of any man who can carry a point better than he can. But I will tell you what will happen in most of the towns if his plan is put into practical use. Your assistant teachers will be the girls who have failed in your high schools, and who cannot do anything else. I wish to emphasize one point, that if this system of the kindergarten school, which we seem to advocate, is to be attached to the common schools of our cities, it must be attached to the side of the intellectual development. I believe that just in so far as you put your stress upon the occupations and games, those children will be weak when they pass out into the other branches of the school. I heard Miss Harrison, the other day, state, with reference to the people: "You know the public is often enamoured of many ideas." I heard her say that visitors go away from the kindergarten and say: "How beautifully those children dance; how graceful they are." She remarked at the time: "Those people do not have a very clear conception of what the kindergarten is for." I would emphasize the statement, also, that it takes a better teacher and a more competent teacher to handle a kindergarten than it does to handle any other primary school. That semi-Lancasterian school is fallacious. [Applause.] What harmed the St. Louis schools was the incompetent

material that got into them. Miss Susie Blow, who has never had but one equal in this country, and that Miss Harrison, said she could never bring out all the best material in the child by that system. In her report it will show this very thing that I am now speaking of. If you are going to make a nursery out of this kindergarten, any one can come in and wait on these children, and bring in their luncheon, and all that sort of thing. Miss Harrison says that a teacher who is strong enough can teach all day. I do not know any one teacher in St. Louis who is teaching all day. I believe that one of the most dangerous things is the starting a kindergarten upon a basis that is fallacious and faulty; and I think the kindergartners themselves appreciate this. The only place where the point of expense is tenable is where a city has a fixed income. For instance, I have in my mind a Western city that has to maintain its schools on a four-mill tax. It has most excellent schools, and the board of assessors suddenly decreases the assessed valuation materially. That same condition was met in St. Louis some years ago, and it will have to be met here, I suppose, sooner or later. I have in mind this idea: I cannot see how the kindergarten, which has to have a room larger than the primary school, where the number of pupils to a teacher is to be less than in the primary school—how it is that the kindergarten is to cost less than the primary school. It does cost more, it ought to cost more, it is worth more. [Applause.] One way of reducing the expense is by cutting into it in a sweeping manner. Then your kindergartens will be deluged with this incompetent material. I have not heard that the St. Louis girls and boys have developed great intellectual strength in comparison with the boys and girls of cities that have not had the kindergarten. I think this is due to the starting with incompetent material. There are none of us who can have the choice but who will take the best material we can get. I would rather have one or two kindergartens started in this city on that plan, than to start a much larger number on the other plan. I did not say in my paper that the kindergarten did not need a supervisor. I said that the supervisor of the kindergarten should be some one who lives in an atmosphere of love, and whose every impulse tends to elevate intellectual thought; one who takes in something else in the world besides the kindergarten, and who does not seek to build up an alien institution that will not rise up into the primary schools, so that there may be schisms between the departments.

COM. HARRIS: As Mr. Fitzpatrick has referred to my school report, I want to say that the results are different from what he has stated them. The results are more favorable to the kindergarten, and they come from the hands of teachers, nine out of ten of whom were opposed to the kindergarten. These records were made by those teachers. I want to say that most of the principals were opposed to the kindergarten, on the ground that the kindergarten would overload the system and decrease the

salaries. I ask any one's attention to the statistics in that report, because we examined the subject all over the city and brought in those results.

SUPT. MALLON: I do not know now what Mr. Fitzpatrick's opinion is in regard to the duty of the State in the matter of educating children at the proper age. Is it the duty of the State to educate children at the kindergarten age?

SUPT. FITZPATRICK: Yes, if you have a kindergarten age fixed. I believe, though, in not going below four or five years of age.

SUPT. MALLON: But you do not answer my question. Is it, in your opinion, the duty of the State to educate children of the kindergarten age?

SUPT. FITZPATRICK: Yes, it is the duty of the State.

SUPT. MAXWELL: I now renew my motion to refer the resolution to the Committee on Resolutions.

The Chair put the motion, which was carried. The Convention then took a recess.

WHAT CAN BE DONE TO BRING PUPILS FURTHER ON IN THEIR STUDIES BEFORE THEY LEAVE SCHOOL TO GO TO WORK?

BY CHARLES W. HILL, PRESIDENT MASSACHUSETTS SCHOOLMASTERS' CLUB, BOSTON.

THE topic assumes the existence of a class of pupils whose school life is made undesirably short, with school acquirements correspondingly meager, by some real or supposed necessity for exchanging the work of the school for those forms of activity in which the pupil becomes a wage-earner. The assumption is all too well founded. I have not thought it necessary or desirable to inflict statistical tables bearing upon this matter upon a body of men who, of necessity, spend so large a part of their lives at such tables, and whose requests for material therefor, addressed to the busy workers in the schoolrooms, sometimes sound the knell of cherished plans for rest or recreation.

Boston is not below the average of her sister cities in holding her pupils through the grammar course. By the report of Supt. Seaver on this matter it appears that less than three-eighths of those who enter our grammar schools finish the course and graduate, the other five-eighths falling out before reaching the end.

Assuming that these proportions are fairly representative, and assuming that a child should at least finish the grammar course before leaving school for work, we realize something of the great importance of the subject before us. It is not a matter affecting a few of our pupils only, but is of great importance to large numbers of those who for a longer or shorter time may be connected with our schools. A discussion of this topic is especially timely, in view of the attention which is being turned toward the work of the elementary schools by the criticisms and propositions of the New England Association of Colleges, which you heard so ably and skillfully presented last evening. Some of these propositions are wise and have been for some time in practice in our best schools. All are put forth in good faith and with an evident desire to benefit the schools.

It is unfortunate that their authors lack experimental knowledge of what is now being done in our elementary schools, and of the average ability of the pupils instructed in them.

Beautiful theories, which seem unassailable, sometimes need consider-

able adjustment to facts and possibilities when the light of a personal experience is thrown upon them.

These changes are proposed from the standpoint of the college; I do not say in the avowed interest of the college, for that would not be true. Still, there seems to be an easily traced and perfectly natural and proper anxiety, on the part of these distinguished educators, that our school courses should face the bright boys and girls toward the doors of the college. Almost of necessity, we look at the world from our own standpoint, and in weighing opinions this fact should be kept in mind.

The naturalist sees in a tree an opportunity to explore the mysteries of secretion and growth, the poet and the painter see a thing of beauty and a perpetual joy, and a woodman sees so many cords of wood. In judging what you are to do with the tree, and in taking advice, you need to know whether it is the poet or the woodman who gives it.

We all agree with the college presidents that as many of the bright boys and girls should take the college course as can spare the time, but only a very small minority do or can take it—one in fifty it is said. They agree with us that the supposed or real interest of the one must not be permitted to eclipse that of the many, especially as the one is usually, by endowment and surroundings, the one best able to care for himself.

It is particularly gratifying that this large and influential body of educators turn their thought, for a time, away from the fortunate and gifted to the less fortunate, less interesting, struggling majority; to those who, by force of circumstances or their own inertia, are deprived, or deprive themselves, of the benefits of a full course in our grammar schools.

In order to discuss intelligently the topic before us, we need to recall to mind some of the causes which take such pupils out of the schools, and also some of the reasons why the grammar course, or its equivalent, should be completed before school-days close. Among the causes which operate to shorten school-life the cupidity of the parents of some children has a prominent place. Owing, partly, to the suicidal laxity of our immigration laws, there is a large and increasing number of parents among us, not all of them of foreign birth, but sordid and alien in spirit, who are perfectly willing their children should grow up in ignorance, and even in vice, if only they may lazily stretch themselves in the sun while they continue their worthless and corrupting lives by means of the money earned, begged, or stolen by the poor unfortunates who are forced to call them parents. Such children in our large cities are often so employed as to evade the laws restricting the employment of child-labor, the cupidity of the parent being aided and abetted by the equally culpable cupidity of the employer, whom the sharp competitions of business have made blind and deaf to all considerations except the ratio of profit to cost.

Very far removed, in the intellectual and moral scale, from such parents as we have described, is another class whose children do not as a rule

complete the grammar course. They are the parents who have fallen behind in the race of life, a race so sharply contested that Carlyle says: "Woe to him who stops to tie his shoe-string." Having thus fallen behind, the tide of remunerative business goes by their doors, before which the wolf of an unrelenting poverty stands, till in desperation the child's schooling is sacrificed to help keep the family together and off the public charge.

There is still another class of parents who neither from cupidity nor poverty are dependent, but whose children early terminate their connection with the schools. They are the easy-going parents, who, having had few school advantages themselves, and having been able to make their own way fairly well without them, fail to appreciate the advantage to their children of at least as much as the grammar school can offer. Such parents, shut up in their little world like passengers in a railroad sleeper, fail to realize that the train of modern life is passing on with lightning speed into new and more intricate conditions, and that what answered for them in their day a very good purpose will leave their children as far behind in the ever sharpening competition of society, as that city would be which should now depend upon stage-coach connections with the outside world.

The children of such parents often hear so much about self-made men, who, while never having attended school more than a few weeks or months, have yet risen to the highest places, that the impression is sometimes left upon their minds that school preparation is no advantage, if it be not a real disadvantage, to the smart, enterprising fellow who "has it in him."

Such parents, or any others, would do well to teach their children that real force of character will enable them often to rise superior to circumstances, but a great harm is done when such lessons are so taught as to lead the child to despise those early school advantages which give such a tremendous start in the race of life. Often it is against the wishes and best judgment of the parent that school connection is broken. The lazy fellow drags himself out of school because it is too much of an effort to keep in sight of his mates who are willing to work. Then there are those at the other extreme, who scent the world's battle from afar, and long to be in it; who, intensely active, find the restraints of school and school work irksome; who look forward with an intense longing to the time when they shall be in business and go down-town with the men to do something manly. Then begin the pleadings to be allowed to leave school and go to work, until the too yielding parent succumbs, school connection ceases, and work begins. A short experience often dispels the illusion and turns the poetry of anticipation into the hard and grinding prose of realization. Then come bitter regrets, but school ties are broken, time has been lost, pride prevents a return to take one's place among younger associates in

school work ; and so the poorly equipped fellow, now conscious of
take, goes handicapped into the hard struggle, almost sure to fail
highest success.

The long time required to work up in almost any good bus
destitute of influential help, very naturally leads many a boy, wh
otherwise be glad to continue in school, to question whether he c
the time.

But, while parents and pupils are justly to be held to respon
this matter, the teacher and the school authorities are not alway
blame. Children, hungry for intellectual food, have held out t
for bread, and we have sometimes given them stones ; they
for fish, and we have tried to persuade them that serpents w
Happily the stones and the serpents are being removed from
fare, and this reason for cutting short the school course no l
to the former extent.

The causes, then, which we find for the failure to hold son
school as long as would be desirable exist in the cupidity,
easy indulgence of parents, the laziness or impatience of pu
failure of the school, sometimes, to meet the needs of those
extra time to spare upon school work.

Let us now consider some of the reasons why it is impor
pupils should be further along in their studies before the
to go to work; why, if possible, they should complete
course.

A reason, not of the greatest importance, is the moral p
by carrying to success what one begins. One of the most
educators in Boston was asked if he did not intend to wit
from the grammar school and place them in the Latin sch
could earlier begin their special preparation for college.
"No ! whatever course of study they begin, I intend they
and not acquire the habit of leaving one thing undone to
Perhaps he was an extremist, but the habit he sought to
very great value to his boys in the restless age in which
If it be unwise to leave a course of study unfinished in
another, it certainly cannot be wise, except from absol
leave it unfinished with no purpose of beginning anothe
noted that a pupil, dropping out of a course of study b
it, loses the most valuable part. If the course is one
loss of the last two years is the loss of more than a th
than a half. It is in the beginning that the cost is mo
to the result, whether it be in moving a railroad train,
or mastering a course of study.

A very important reason for bringing pupils furth
studies before they go to work appears in the gro

higher and higher degrees of intelligence to do successfully the ordinary work of life.

If it was ever necessary that there should be an ignorant, menial class to do contentedly the coarser and more disagreeable services necessary in a complex civilization, there is no such present necessity. The place of the unskilled laborer is being filled by machinery to a greater extent each year. Intelligence is needed to guide and manipulate these machines, themselves almost endowed with intelligence. Skilled labor is in demand, and will be more and more so as our country grows older, and the rougher work which newness involves disappears. There is danger in adding to the army of unskilled and unintelligent labor, either by native or foreign recruits. The danger approaching imminence is that those capable of performing only the rudest kinds of labor, and finding the demand for such labor disappearing, will not only be driven into crime and pauperism themselves, but, as tools in the hands of unscrupulous leaders, become a menace and peril to the body politic.

And this leads us, naturally, to notice the increasing necessity for intelligence, in order to perform aright the duties of citizenship. The tariff: shall it be protective or for revenue only? The coinage of silver: what will be the effect of its being unrestricted? The relation of capital and labor: how can each be made the most helpful to the other?—These and questions like these, now demanding serious thought and careful adjustment, are as far beyond the reach of one who has never been taught how to look for cause and effect, or to reason with any degree of correctness, as are the mountain tops to the child who lifts up his hands to them. The only part he can take is to follow his leader, and the leader he chooses is very apt to be a demagogue. The duties to the discharge of which the state has a right to call the citizen, from casting a ballot under the Australian system, and serving on a jury, to holding offices of trust and responsibility, cannot rightly be fulfilled by him who has had but little or no mental training. As the principles of a true civil service reform are carried out, he who lacks mental training will be more and more shut out from the public service, and rightly, too, though by natural endowment he might have been made ready to serve the state well in some line of effort for which he may have special aptitude.

There is one other reason, among many still unnamed, for advancing the pupil further in his studies before going to work, which is too important to be passed by unnoticed. It is the acquiring of power and inclination to use wisely the increasing hours of leisure resulting from the shortening work day. For the man who reads and thinks, who can keep company with the good and great of all ages, it is a priceless blessing to have some hours after the day's labor in which, with his family about him, he can commune with the past, study the problems of the present, explore the works of God, and grow into his likeness. But it is a ques-

tion whether it is a real advantage to that man who has no resources in himself or in his family, to have his work day shortened. Thoughtful observers are coming to look upon the lengthening time after work hours as a positive source of danger to the ignorant and thoughtless. They, finding the time drag, are easily tempted to turn to the saloon as a convenient meeting-place with kindred spirits, and to vicious sources for the excitement craved. We find, then, that we should carry our pupils further on in their studies—because of the moral power which comes from carrying to success that which is begun; because, for the times in which they are to live, a considerable degree of intelligence will be necessary for even the most ordinary work of life; because, otherwise, the duties of citizenship cannot rightly be performed; and because in no other way can they be prepared to make the best use of leisure time.

In considering what can be done to retain all the pupils of our elementary school till each shall have gotten as much out of the school as for him may be possible, it is evident help must come from without and from within. The state and the home must become allies of the school to accomplish the best results. One very helpful agency in accomplishing the work we are considering is the *kindergarten*, the duty of the state toward which you consider at this gathering. By means of this agency the school work and discipline may be extended downward into the unproductive years of the child's life. The kindergarten is proving itself capable of shortening ordinary school life a year; that is, before the age of five, that may be accomplished which will bring the child of eight as far along in his school work as an ordinary child of nine would be without these advantages. And this can be done not only at no risk to the child's physical well-being, but to his great advantage in that respect. Its work and play are so wisely planned, and so in accord with nature's ways, that the child is much better developed, physically, than he possibly could be if left to his own devices. He is happier to be occupied a part of the day with his teacher-playfellow, than when the whole day passes without regular occupation. It becomes a great joy to him to be able to see and do for himself, and he forms habits of observation, patient endeavor, and of being in right relations to those about him, which not only easily save him a year in the primary schools, but which also come to his aid all the way through his school life. Educators, interested in any department of school or college work, should rejoice that this helpful agency is so rapidly growing in usefulness and power just now when it is so much needed, not only in meeting the difficulty now under consideration, but also when its natural methods and true aims are so much needed in leavening the spirit of the work to be done all along the educational line. This association, and all educational organizations, should unite forces in helping to make the kindergarten an integral part of our school systems. It would be an agency for the accomplishment of

great good in any community, at any time; but with us, with our hurry and high pressure felt all through our school life and work, it becomes of especial importance to save that year of unproductive child life, especially as his physical and moral natures are both greatly benefited thereby.

As it is comparatively easy to hold pupils in school up to eleven or twelve, the lower part of the course of study, which very nearly all our pupils take with more or less thoroughness, should be made as rich as possible with those studies which will so interest as to help hold for future work. This is being done to a much greater extent than is realized in the higher educational circles. Nature studies can be made still more useful. Nothing elaborate should be attempted. The "R" studies should not be crowded out. But if the boy who does not memorize readily, or reason accurately, finds that what he knows about birds and stones, and what he has noticed about physical and chemical changes, are considered useful knowledge and give him a standing in the class, it will not be as easy as it otherwise would be to get that pupil out of school.

Something more than we have had of *manual training* is to play an important part in holding these short-time pupils in school. Attention has already been called to the fact that many children are withdrawn from school at an early age, because of the long time it takes to work up to a good position in almost any occupation; but if he is to work with his hands, here is a line of school work which must tend to shorten that long period. He sees that it must give him the lead in the race, and so he and his parents often come to regard it a great privilege for him to be able to remain where such preparation is possible. He may, and probably does, exaggerate the relative value of this part of the course of study; but, nevertheless, it holds him in the school, and so gives him time to get interested, also, in other lines of school work, as he finds that the more he knows along any line the more he is helped along every other. This is not mere theory. Manual training, where intelligently introduced, has already been found to have a decided influence in retaining these pupils who are so inclined to cut school life undesirably short. It doesn't make angels of them, nor does it always lead to brilliant scholarship; but it does help, in very many cases, in giving them an intelligent and hearty interest in school work.

Something more of flexibility in our courses of study is desirable. There are classes in some of our city schools in which, on entering, not a pupil can talk or understand English. We are sometimes asked, in a triumphant sort of way, "Can't American schools do for their pupils what German or French schools do for theirs?" Now the German teacher sits down before his pupils, all German, with German type of mind and German traditions, and makes his pupils good Germans. We do more than he does: out of divergent and antagonistic races we are making *a new race*, and it ill becomes one to minimize the value of the work. Such

classes are clearly outside of any ordinary course of study. But, in less extreme cases, there are topics of study which are desirable for pupils who are to continue some years in school, which are less desirable for those who, presumably, are to enter early upon the weary struggle for bread. Such topics can be dropped out for these pupils, thus gaining time for the work of highest importance to them as individuals and future citizens. A pupil thus situated will be able to keep well abreast of his class in the work he does undertake, his self-respect will be raised, and he will the more easily be retained in the membership of the school.

This differentiation in the course of study should operate not only to retain longer in school those who are in danger of leaving to go to work, but also in retaining in the elementary schools, while they properly belong there, the pupils who are now drawn out to prepare for higher courses of study. There need be but few changes to meet the wants of both extremes. By far the larger part of what the elementary schools can or should offer is equally needed at both ends of the line.

To reach most effectively these children who are in danger of continuing but a short time in school, requires an individualism in teaching and molding which is not possible to the extent necessary, while a teacher has as large a number of pupils as in this grade is now generally required. In Harvard College the ratio of pupils to instructors is seven to one. In Boston the average number of pupils to a teacher in the grammar grades is fifty-two. By rule it is fifty-six. Give the grammar schools the same proportionate teaching force that Harvard College has, and I am not sure that the teachers would not only take all the new studies recommended, but stuff the poor children with Greek and Hebrew to keep *themselves out of mischief*. In the story of rescue from the grammar school, and of refuge in the Latin school, with the great personal gain resulting, which we heard last evening, the speaker forgot to inform you that in the grammar school the number of pupils to a teacher is from fifty to fifty-six, while in the Latin it is from thirty to thirty-five—less than two-thirds. Also, that in the Latin school each teacher, after a probationary period, attains the rank and pay of the principal of the grammar school, making the cost in the Latin school somewhere about twice as much per pupil as in the grammar school. So that the rescued party didn't pay for his bringing up in the Latin school unless he came to know at least twice as much as his mates whom he left behind. It may have been true then that one did know twice as much, but it isn't true now.

If our college presidents really wish to help the grammar schools in the most effective way, let them join hands with us in seeking to reduce the great inequality as to number of pupils to a teacher, which now exists in comparing this grade of schools with those above it.

No teacher with fifty-six pupils can bestow upon each that individual study and interest which are necessary to search out in the depths of the

child's nature—depths, perhaps, never explored before—those hidden springs of interest and action, which, being touched by a friendly hand, cause the child to feel the throbbing of a life hitherto unknown to him. Thus new interest is excited, dormant faculties are aroused to action, bonds of mutual sympathy come to bind together teacher and taught, and the pupil becomes so happy in his work and so fixed in his place that nothing short of an imperative necessity will be able to take him out of the school.

A good teacher will do something of this work in spite of excessive numbers, or of anything else, but she longs for strength and opportunity to do more of it. Such teachers often become morbidly self-condemnatory as they see pupils hardening under the influences surrounding them, sturdily refusing to be moved by any ordinary incentives, but whom the teacher feels sure could be saved to the school and to themselves, could she but find the right way.

The harm arising from giving a teacher such numbers as make it impossible for her to do her work most successfully is admitted by all; but, when it comes to a remedy, the greatly increased cost of suitably increasing the teaching force in our elementary schools seems to many to be an unanswerable argument. But is it so?

In this matter the Scripture maxim applies with peculiar force: "There is that scattereth and yet increaseth; there is that withholdeth more than is meet, but it tendeth to poverty."

While, to secure a proper individualism and the highest success in teaching in the lower grades, a larger proportionate teaching force is imperative, the need of improvement in the quality of the work is quite as urgent. No class in the community know so well as the superintendents, whom I have the honor to address, that during the last few years very great improvements have been made in the work of the elementary schools—improvements which many of those whose work is mainly in the higher grades fail to realize or appreciate. There has been a decided elevation of the plane on which schoolroom work in these grades is being done. There is still need, however, on the part of teachers, of more skill, better preparation, a more enthusiastic love of the work, and an unselfish devotion to it. There are still too many cases of appointments made, and teachers retained, in which the supposed interest of the teacher is the ground of action rather than the best good of the school. No matter what may be the circumstances of the candidate, or the past services of the teacher, neither should have any weight against the real interests of the school. The Teachers' Benefit Societies, now coming into being in our large cities, are to do much toward making it possible for teachers whose strength declines to leave their work in more vigorous hands, releasing themselves from the exacting duties of the schoolroom, which they are now no longer able to perform, while at the same time they can retain

their own self-respect and not become altogether dependent upon friends or charity.

Teachers who enter upon the work, or continue in it, with no love for children, and no solemn sense of responsibility regarding the work to be done, must be mercilessly weeded out. A teacher who cannot see in each child under her charge something to call out either her love or her pity, and show her warm, heartfelt interest and unselfish effort, is not the one to hold pupils in the school. A teacher who will crowd out of school pupils she deems undesirable, that she may have a prettier class or an easier time, is unworthy of her calling and recreant to her most solemn obligations. Such a teacher is in honor bound to withdraw from her place and let some one take it who has the heart qualifications therefor. Some teachers rarely have pupils leave their classes to go to work. In some way obstacles are overcome, the pupil holds on while the class remains in that particular room, and forever after holds the teacher in grateful remembrance.

To aid teachers in this work of holding pupils in the schools, our schoolrooms should be furnished with all the appliances necessary for awakening interest, stimulating thought, developing the powers of observation, and making a felt connection between the work of the schoolroom and the activities of the greater world outside. In too many American schoolrooms the progressive teacher is left to make her bricks without straw, or gather it when she ought to be resting, or draw upon her scantily filled purse to purchase that which, to her, is indispensable if she would develop and hold the interest of those who are in danger of dropping out. Too large a share of school funds has been spent in showy buildings, and too small a share in furnishing those appliances which are to the teacher what his tools are to the mechanic. A better day is dawning, and this poverty of means for interesting pupils needing encouragement is not always to stand in the way of teachers doing their best work.

When the kindergarten shall have taken its proper place in our school system, when such changes shall have been made in our courses of study as are necessary to meet the needs of all classes of pupils, when in all communities suitable school buildings and appliances shall be provided, when teachers unfitted by nature and acquirements for the delicate work of teaching shall have been dismissed, and only teachers of sterling worth, skill, ability, and enthusiasm are to be found in our schoolrooms—then the question we are considering will be answered for large numbers of these short-time pupils. They will complete the grammar course, at least, and go forth in some degree fitted for their place and work in life.

But for other large numbers the question is not answered. Were all possible perfections of school conditions at our command, what are we as superintendents and principals to say to that mother who interrupts her "song of the shirt" long enough to come over to the schoolhouse to talk

with us about taking her daughter, now twelve years of age, out of school? Shall we show her our splendid equipment and tell her how much we can do for her daughter? Shall we tell her that we cannot spare the child, that she is the ornament of her class, and if allowed to remain is sure to come up, by and by, not only to an honorable self-support, but to be also a source of pride and joy and help to her mother? We may then learn, for the first time, that that mother has just as clear an apprehension of the value of an education as we have, that she sees with a clearer and fonder eye than we possibly can the signs of promise in her darling child. Our kindness may win her confidence enough for her to lift the veil from the family life, and we shall see with surprise how much it has cost that mother to send the child to school so long, keeping her neat and tidy all the time. We may learn that the father, now dead, had set his heart upon giving the daughter a good education, and so fitting her to support herself in the higher walks of life. We shall find that the mother has burned the midnight oil, not as an exception but as a rule, that such plans might be carried out, and that now she has come to the parting of ways. Her unaided strength can carry the burden no longer; she has too much refined, womanly spirit to beg; she has no friends who can help; and the little that the daughter can earn is her only known resource. What shall we say to such a mother? As things are in most communities, there is but one thing to say. A present necessity for food knows no considerations of future equivalents in mental power or social standing. The food must be had at whatever loss to the child. The child must become an earner in that family, even if her whole future is thereby narrowed and darkened. It will be said that the picture is overdrawn, that there are really but very few such families. We all rejoice that there are no more, but the number of parents who are thus compelled to weigh the school advantages of their children against daily bread is larger than is generally supposed. Such parents, be they few or many, deserve sympathy and help. How helped? It is not an easy question to answer. Two things should be taken for granted. In this land of plenty every child should have, does have, a right to its childhood for school purposes. The State should lay its hand upon so much of the great wealth of the community as will enable her to guarantee this privilege, this right, to every child. But the mother who came to see us would rather die than become a pauper. The feeling marks the nobleness of her nature. Christian statesmanship is surely adequate to the working out of the problem how necessary aid shall be rendered in the support of the children of such parents during the time necessary to be spent in school, so that the family shall not be pauperized nor the State's bounty be misapplied. Possibly this aid may best be given by means of some organization not directly under State or municipal control. However done, there should be in it no suggestion of charity or pauper-support, but it should

be placed upon the high ground of the *right* of the child to the opportunity to fit himself for the responsibilities of adult life—responsibilities growing more and more difficult to meet.

There remains to be considered the question, what shall be done with and for such children as, at the best, get only snatches of schooling between long intervals of absence, some of whom do not darken the doors of the schoolroom from January to December. Among these truants and absentees are some children, stubborn and perverse in nature, from comparatively good homes, whose parents would be glad to have them attend regularly had they the moral power to enforce their wishes; but most of them are children of parents, who, as has been already noted, with cunning cupidity or sheer indifference, evade or trample upon all laws for the schooling of their children, in whose tenement-house homes the child works unchallenged; homes often in which the common decencies of life are unknown, and in which a child without strong counteracting influences has about as much prospect of growing up to an intelligent, honest, virtuous manhood or womanhood as a thorn-tree has of bearing grapes.

These are the children who need our wisest planning. No one can visit the crowded tenement-house districts of our large cities, or walk through the streets of such sections on a pleasant Sunday afternoon, when the children swarm out to play, notice the marks of early and inherited vice, listen to the profane and obscene talk which is the current medium of communication—no one can make these observations and not be profoundly impressed with the gravity of the situation, and the peril involved in it. Now, what *can* be done for these children? When brought into our schools, as where there is an efficient truant force many of them are, it is most difficult to hold them, and if held there is great risk of a contaminating influence in which the loss to otherwise good children overbalances the good done them. Shall we let them go, and try to forget their existence? Then good-by to our form of government. We cannot go on forever with an ignorant and debased class multiplying about us. A free government commits suicide when it allows an ignorant and vicious class to increase in the community. Such a government must depend upon the intelligence and virtue of its citizens or it becomes the worst of all despotisms, that of the ignorant and vicious *mob*. No: these children cannot be left to come and go in our schools or absent themselves altogether, as the whim may lead them, or as their parents may fail or succeed in finding something for them to do. In many communities more rigid laws regarding truancy and absenteeism, especially absenteeism, are imperative. It should be no more possible for a parent to deprive his child of the opportunity of going to school by employing him at home than if he be employed in a store or factory. It should be made the duty of some officer to make frequent visits of inspection, especially in tenement-house neighborhoods, to see that children are not being

deprived of their school rights and privileges. What shall we do with such as cannot be safely admitted to ordinary school privileges, or such as will not attend regularly when admitted? For such children a school like the school in Detroit, known as *The Ungraded School,* would be an important auxiliary to any school system. (For facts regarding this school I am indebted to a recent report of Supt. Seaver, of Boston.) This is a school which the Board of Education of the city is empowered by law to establish, and into which truant officers are *required* to gather all habitual truants and absentees, as well as those pupils from other schools who are incorrigibly turbulent, vicious, or immoral. Such pupils are not entirely removed from parental control, but they are obliged to carry their dinner, and are under the care of the teachers during the time between sessions as well as in school hours. Truant officers are empowered to compel attendance upon this school, and any absence is immediately made known to them. The term for which a child is sent to the ungraded school is indefinite in length. By good behavior, punctuality, and earnest work he may make it short, or by the opposite course he may make it long. No outside power is allowed to interfere and grant an undeserved release. Upon the child alone depends the length of his detention. In Detroit *one term* at the ungraded school works reformation in three-quarters of the cases—*a grand success.* But when such a school as this Detroit school shall have done all it can do, there will remain children, in quite considerable numbers, whom it will be impossible to save while the home and street life exert their baleful influence for so considerable part of the day. For such children the *parental school* is a necessity. They must be taken out of the mire and filth of their surroundings and placed in charge of such foster-parents as shall give them what they have never before known, a real home. A parental school is not a prison, but a school-home, a school in which the child is taught what he most needs to know, especially along the lines of manual training; a home in which he shall learn what the word "home" means, and in which he shall be placed under those healthful, elevating influences of which a real home is the center and inspiration. Membership in such a school-home should be continual, until if possible a relish shall have been acquired for the new ways, which shall restrain from a return to the old haunts and habits. Such a work will be often discouraging to those who engage in it. It will be too much to expect that heredity and early surroundings will in every case be overcome, but the child will at least have had a chance, and many will be encouraged and helped to a worthy and successful struggle against the odds of the lives to which they seem born. It will be expensive—expensive as it is efficient. In all our large cities there are children, in very considerable numbers, who ought to be gathered into such school-homes. Some cities have already started in this direction. Delays are dangerous; children who may be

rescued to-day, to-morrow will be beyond our reach. When we shrink from the expense of such reformatory work we should bear in mind the fact that such children, if let alone, will almost inevitably grow up to be a public charge, either in our penal or our charitable institutions. Which will involve the greater cost—this or that?

It may be said that this assisting during school attendance in the pecuniary support of the children of the worthy poor, and the colonizing of the children of the depraved and vicious, savors too strongly of socialism, that it carries the work of the government too far, that the school supported at the public expense is as far as the government can properly go. It was far enough once, but do not the times in which we live and the conditions surrounding us demand more than that now? The absolute right of the child to so much of its childhood as is necessary for school purposes should, in our country at least, be regarded as an *axiom*, and whatever custom, law, or precedent stands in the way of giving this right practical force must give way.

Realizing, as we do, the importance of carrying these pupils further along in their school studies before they go to work, we shall use the power and influence of our positions in aiding to bring about such changes, both within and without the schoolroom, as will accomplish so desirable a result. We will not fail to bear in mind the fact that, much as these children need instruction and mental discipline, they need still more the strengthening and development of the moral nature and purpose. We shall teach, that knowledge put to bad uses is worse than ignorance, that learning is not chiefly valuable as a means for making money or gaining power, that it is infinitely better to be useful than to be rich, and that the more one knows the more useful he may make himself. Whatever we do or fail to do for the happy children of prosperous homes, we must not fail to realize the vast importance of doing all we may for these children born under a cloud, for whom often the only door of escape from the wretchedness and degradation of their home surroundings is the schoolroom door. Let us send into their lives as much of sympathy and help as may be possible, realizing that with them as with happier children we are working upon imperishable material, and if enough on the alert and sympathetic enough, we so may make our mark for good that no untoward influences shall ever blot it out. Let us hear as addressed to us the admonition of the great Teacher: "Take heed that ye despise not one of these little ones."

DISCUSSION.

[Discussion reported by Hon. O. E. Wells, of Wisconsin.]

Hon. J. H. Shinn, Little Rock, Ark.: It has been said, that of the entire number of pupils attending the schools sixty per cent. are in the

primary grades, from six to ten; thirty-five per cent. in the grammar grades, from ten to fourteen; and five per cent. in the high school, from fourteen to eighteen.

It has also been said, that of every hundred entering the primary less than half of them are found pursuing it to its end; less than thirty per cent. finish the fifth year; less than twenty per cent. the sixth year; less than ten per cent. the seventh year, and less than six per cent. the eighth year.

Taking these figures as bases, let us look at the problem: 12,325,411 children enter the primary department; they divide as follows:

7,395,246, primary; 6 to 10 years of age.
4,313,893, grammar; 10 to 14 years of age.
616,270, high school; 14 to 18 years of age.

This showing would not be so bad if all children entering each of the three great divisions pursued it regularly to the end.

But of the whole number entering the primary department less than half pursue it regularly to the end; that is, less than 6,162,705 children go beyond the primary; that is to say, fully 6,162,705 children receive their whole school education in the primary department before the beginning of their tenth year; that is to say, one-half the children of school age in the United States graduate from the schools in the beginning of their tenth year.

The question is, "What can be done to bring children on further in their studies before they leave school to go to work?"

1. What studies have they to be brought on in? We begin to bring them further on by setting up limitations at the beginning which may not be passed.

We say at the start: No child shall know more at the end of four years' teaching than this:

Reading: Finish the third reader. Thirty-six months or 720 days on the first, second, and third readers.

Arithmetic: Through addition and subtraction of common fractions, with selected tables of weights and measures. 720 days on 100 pages of elementary arithmetic.

Geography: The western hemisphere in outline, without a book.

Penmanship: Words, phrases, and short sentences.

Language: Develop the idea of an action word with an object after it to complete the sense; develop the idea of when, how, and where an act may be performed. Four years gone, graduation at hand for over 6,000,000 children, and the transitive verb and objective case just reached, together with the use of adverbs. The whole of the last four months to be diligently devoted to the development of the transitive verb and the adverbs.

In orthography they are limited to about 750 words.

In looking over this course, the one almost universal in our schools, one is prompted to ask, "Could there have been a better scheme devised for keeping the children back?"

Wise men sometimes make great mistakes, and it is certainly a grave mistake to prepare a course of study for a set of children who are expected to continue regularly therein for twelve years, and apply it rigorously to the full one-half of our children who quit at the beginning of their fifth school year. The National Educational Association advised a system of public education which may be justly termed "the three fours." Primary course, four years; grammar course, four years; high school course, four years. This same body then outlined the work which good schools might safely do in twelve consecutive years.

The schools of America fell into line, and the twelve-year course became the standard for nearly all schools. To string out the common and high school branches through twelve years, it became necessary to dilute the matter in the first four; to compensate for the singular dilution, the country was promised greater accuracy. Accurate in emptiness. Then more than 6,000,000 children were put into this course and required to master it. Then ten months to ten became a mania. Boys became so proficient in their alphabet after four years' teaching that they could say it backwards and read the third reader. They then quit school, and grave men began to discuss how to get children further on in their studies before they quit school to go to work. Is the mental stature of the average nine-year-old only third reader high? Grammar to the transitive verb high? Arithmetic to fractions? If so, then we can do no more than we are doing. If not, then the first step towards an answer is a destruction of the false standards that now limit the progressive development of the great masses of the children.

12,305,411 children are the work we have to fashion.

Only 739,504 enter the high school. 11,585,907 cannot go to the high school. They are as effectually barred out as if restrained by law. The environment of the universe takes more than ninety-four per cent. of the children out of school at the beginning of the fourteenth year. And we, grave teachers, deliberately construct a course of study which deprives 11,325,411 children of any school knowledge of history, civil government, morals and manners as a study, citizenship, science, language, algebra, and geometry. My answer to this question is, to remove the course barriers that now obstruct child progress. Try the three-threes instead of the three-fours. Do from six to nine what is now done from six to ten; from nine to twelve, what is now put from ten to fourteen.

1. The standard for the primary and grammar grades is too low.
2. It is too easy, and therefore requires too little labor.
3. The practice advances teaching at the expense of learning.

A second answer is: Have the children use good, logical books to obtain facts, and by a right use of these facts grow in developed power; that is to say, abolish to an almost total degree the habit of developing facts that need no development, and of hunting everywhere for matter that is already in hand. Act as if the average boy had some sense, require him to work, and the masses of children will get further along in their studies. Oral teaching, unless done by masters, is a fraud of the worst kind, and is daily cheating thousands of children out of their heritage. Good books are authority and are lasting standards. Until the human mind reaches its last and highest estate, the power to reason rightly and independently, it should lean upon the books which contain the logical expressions of those who have reached that estate. Children should be led to lean upon authoritative statements of the truth, as they would lean upon the Rock of Ages. The teaching of a poor book is infinitely better than the vapidity of an oral instructor who is unfamiliar with his case. And ninety-nine out of every hundred are not so far masters of the subject as to be definite, certain, and logical. To get children further on is to give them great living books full of great living thought, and to require them to rub up against the fatness of the thing. Of all sad things of tongue or pen, the saddest are these, cadaverous orality by licensed men.

A third answer is a change in management. Give the three primary grades into the exclusive control of women. For the high school and grammar grades let the division be as follows; as many male as female teachers; seat the girls from two consecutive grades in one room with a female teacher; seat the males of the same grades in another contiguous room with a male teacher. Let the rooms interchange for recitations. Two influences will act upon each child in each room, in study and recitation, while the government of each sex will be in the hands of its kind.

Last of all: To get children further on requires that adults be pushed further on.

1. Adults must be led to know that public education is something more than public beneficence.

2. Adults must be led to know that public education is something more than public defense.

3. Adults must be led to know that public education is a function of civilized government, without whose exercise it has no right to exist. The common duties of men are common rights which demand a common teaching under a common law. The common hopes of men are common rights which demand a similar common treatment. Duties and hopes are the end of human government. Because these things are common, they should be taught in a common way under a common law. This will only come when each State shall have an educational legislature equal in power and dignity, upon all educational questions, to the ordinary legislature upon the ordinary legislative questions. In the Federal government there

should be a Secretary of Education, equal in the cabinet with any other cabinet officer. In each State all educational questions should be settled by a co-ordinate, independent, educational arm. Great is the Diana of our Executive; greater, perhaps, is the Diana of our legislative department; greater, because quieter, is the Diana of our judiciary; but greater than any one of these, and greater possibly than all, is the Diana of our State public education. We shall never get further on with child education till we advance further with adult education; and the perfection of both will only be reached when the fourth estate, the Educational Department of Government, shall rise like the star in the east to glorify the ages.

JAMES H. BLODGETT, Washington, D. C.: The conditions of education are so diverse in different parts of the Union that we must remember them in discussing questions on a national basis. The statements of speakers in this association are fully true for their localities, whereas the opposite is true in some other States, or very different in another part of the same State.

It may be incidentally remarked that the public prints show the grammar schools of New York city to be crowded with pupils that cannot be advanced because the classes above them cannot be moved out of the way. They are doing what we in the army called "marking time," just stepping up and down without progress.

The report of the Board of Education of Massachusetts for 1890 gives a good opportunity to illustrate the variation of conditions, which are greatly magnified when we consider the differences in constitutional and statute law which control the work that may be done in public schools. The following table is given in illustration:

MASSACHUSETTS.

RANK OF COUNTIES IN PUBLIC EDUCATION, 1890.

	1. Amount appropriated, per child, between 5 and 15 years old.	2. Per cent. of taxable property appropriated.	3. Ratio of average attendance to No. between 5 and 15.	4. Combined average of 1, 2, 3.
1	Suffolk.	Berkshire.	Barnstable.	Barnstable.
2	Norfolk.	Franklin.	Franklin.	Middlesex.
3	Middlesex.	Barnstable.	Plymouth.	Plymouth.
4	Barnstable.	Hampshire.	Dukes.	Franklin.
5	Plymouth.	Worcester.	Norfolk.	Norfolk.
6	Bristol.	Middlesex.	Middlesex.	Suffolk.
7	Essex.	Plymouth.	Hampshire.	Hampshire.
8	Hampden.	Bristol.	Suffolk.	Berkshire.
9	Worcester.	Hampden.	Essex.	Worcester.
10	Dukes.	Essex.	Berkshire.	Bristol.
11	Hampshire.	Norfolk.	Worcester.	Essex.
12	Franklin.	Suffolk.	Bristol.	Dukes.
13	Berkshire.	Dukes.	Hampden.	Hampden.
14	Nantucket.	Nantucket.	Nantucket.	Nantucket.

By amount of money appropriated per child between five and fifteen years of age, Suffolk County stands first, Berkshire thirteenth.

By *per cent. of taxable property* thus appropriated, Berkshire is first and Suffolk is twelfth.

By *ratio of average attendance to the school census*, Barnstable, which was fourth by the first test and third by the second, becomes first, Suffolk is eighth, and Berkshire tenth. By combining all the tests, Barnstable leads the State.

Massachusetts is so uniformly earnest throughout in popular education that the extremely dissimilar tangible results in her towns and counties are especially suggestive in estimating the effect of numbers and wealth on school organization throughout the nation.

Nantucket, last by every named test, nevertheless maintains good schools. It is an island with a small population, mostly native born, but shrinking for the past forty years with a dying industry.

Level Barnstable, which is Cape Cod, has been nearly stationary in population for sixty years.

The rural population of hilly Berkshire has been dwindling for a like period.

Suffolk has increased in population and wealth through vigor absorbed from Nantucket and Cape Cod and Berkshire, and other rural homes, native and foreign.

Our metropolitan cities would soon perish if the tide of country blood did not restore their waste. Let it be noted that Barnstable, a stationary rural county, not Suffolk with its populous Boston, makes the best record.

How to increase knowledge without work, or how to postpone working for a living, has been a question of the ages. The answer has varied with every family and almost with every individual since Adam and Eve left school to earn their bread by the sweat of their brows.

Grant that the advancement at school is inadequate, there was never a time when, in the whole breadth of the land, there was more interest in the subject of education than now. The gains in recent years have been very great, but grown-up children as well as infants want to dig up seeds to see whether they are growing. Certain broad principles are everywhere applicable in education as in agriculture, but treatment must be adapted to the local culture and to the social economies of the region. The municipal and social adjustments of two States differ widely; two counties or two cities of the same State, and even two wards of the same city, are widely unlike. A constant diversity exists between rural and city conditions.

Would not our real purpose be better expressed if we were to ask how we can keep the child in sympathy with the ideal school? The school is but one agency to aid the family and the individual. The family is responsible for the child's ignorance, and the individual is responsible

for his own continued ignorance. Has not popular sympathy, roused by the abuses of child labor in factories and mines, reinforced by social pride, swung to an extreme in condemning all work for the child? In an ideal society the child will grow beside the mother till strong enough to go alone, attempting to imitate her occupations. Presently the boy will go forth with his father. The parents join with other parents to provide schools for instruction and training with the domestic life still the dominant factor. Edward Everett Hale's "Sybaris," where every family has at least a quarter-acre plot for cottage and garden, will be dense enough for the ideal community.

As a coöperative agency the school ceases to secure public sympathy and support when it goes beyond the work in which the coöperators can unite. When the people are essentially agreed in their views of religion and science, it is comparatively easy to arrange extended courses of study; but when wide diversities of conscientious conviction exist in the community, all religious, scientific, and historical instruction, beyond commonplace axioms, endangers the coöperation, yet the great teachers of the world have made the religious motive essential. The danger of abuse, should the army of inexperienced teachers and unskilled school officers attempt to use their own judgment in selecting from the wealth of material by which even the most elementary reading could be ennobled, has led to the enactment of State laws prescribing narrow lists of text-books strongly fenced about with many a "shall not." Taking the country at large, we cannot expect the public school to do the whole work, and we must welcome all wholesome agencies in the general instruction of the people.

Looking at school as a compulsory agency, statute law is excellent as a statement of agreement as to the mode of action where only rare opponents are to fall under its penalties, but when it is in advance of public approval the enforcement is weak. Laws on education particularly require neighborly harmony for effectiveness. The coerced minority of to-day is liable to become the tyrannic majority of to-morrow.

Let us deal with the matter for a moment on the supposition that the public harmoniously offers the child opportunity for unlimited attainment at school. We have two wholly different conditions. In the country the coöperative character of schools is strong, and the influence of the family is prominent. In the dense city the public school stands more strongly as a token of authority, an ally of the police department.

The child in the villages and rural districts is privileged to be trained, in a degree, in industrious habits by his parents, and he gains a stock of knowledge inaccessible to his city cousin. A noted physician of Kentucky, familiar with classics and modern languages, pointing to a cabin with a log sawed out on the side to admit the light, said: "All my schooling was in a house just like that, about ten miles from here, in Bourbon County. I attended lectures and took special lessons after I was grown

up." The Congressional Directory gives a bit of biography of some four hundred men. An overwhelming proportion, as boys, had only common country school privileges, but carried studious habits into mature life, either with or without collegiate opportunity.

Maine, a State still quite homogeneous, with diversified rural occupations, perhaps best preserves the conditions general when Daniel Webster and his compeers had their early training in winter schools. Even the town high schools barely exceed an average of six months in the year, and the young people are busy on the farm and in the shops, and teaching the yet humbler schools in the intervals; yet Maine does not take an inferior rank in comparison of her men and women.

Within a few years industrial training has received much attention, but its popular development has been irregular and almost wholly in the line of manufactures. The rural schools of Central Europe and Scandinavia have gardens and orchards for instruction; the schoolhouse is the teacher's home, and his tenure is permanent. We omit these features in our imitation of the great European teachers, and attempt to copy Pestalozzi's and Froebel's kindergartens without the gardens.

Where the heterogeneous city element dominates, the father leaves home for his daily occupation before his family is together in the morning, and in families of independent incomes the mother too often turns off the children to nurses or teachers, whose service in guarding them from bodily harm and restraining them from troublesome freedom at play is valued above their moral and intellectual work. If life demands all the wage-earning force of the family, the mother, like the father, may be away all the busy hours, and home influence be at a minimum.

The waste of time in the elementary schools is enormous, except when viewed as houses of detention. Children in families, abundantly supplied with books and current literature, will spontaneously read early enough, and not one day need be spent in mere learning to name printed words of one's customary vocabulary. Even a Cherokee or a Hudson's Bay Indian can learn to read in his own language within one week.

As the children grow, severity of grading repels those who are a little out of line with a course of study. There is great irregularity of employment throughout the country, and there ought to be opportunity for boys and girls that have been at work or otherwise detained to go into school at any time of year without being put in classes of much younger children, organized only in the fall or spring. Here lies a strength of the ungraded country school, but seriously changed recently. In cities it is quite possible that part of the labor now bestowed on night schools might be far more effective if ungraded rooms were conveniently open, and there were hearty welcome of the day attendance of those who cannot now find any school-door open when unemployed. Age and maturity are as much to be considered in grading as knowledge of books, and the young person

who looks back wistfully at the rigidly graded school he left has th
conditions of humiliation to face: one, his class has left him; two, i
physical growth makes him conspicuous among younger children; th
he does not expect any credit for relative progress in any prescri
subject so long as he is backward in any other. It is by no means ce
that Hugh Miller and Abraham Lincoln would have been welcome in
model schools. Rigid grading would have been likely to check
freedom of the scholarly Bryant and the exuberant eloquence of Brook
pulpit orator.

Some American States employ more than nine times as many wom
men as teachers. European schools, held up to us as models, e
very few women, especially as teachers of boys.

The external forces in city conditions sometimes overwhelm the
careful and conscientious fidelity of parents. On the other hand,
very worst cases of bad parental management, the stranger who t
point the child to a higher life is apt to find him incapable of acc
anything higher than his parent as an ideal. An education that
children to look down on their parents has to contend against n
The parent who belittles his experience and knowledge before his
because the latter has picked up a petty detail of text-books or of
training that is new to him, endangers the character of his child a
happiness of society.

One of the most important promises of university extension is
working men and women to keep in advance of their children.

The city system rests upon the enforced inability of the parent
the child grow into occupation under his own eye, the crowded co
of living so that a child has no place for wholesome animal activity
cities and the districts that imitate them have stretched their schoo
from two motives: one, giving a semi-police character to the scho
place where children will be safely kept; the other, a feeling t
salaried servants, teachers have too much vacation. The well-to-
relieve their children from the barrenness of city confinement by
them to the seaside, or the mountains, or the woods for the summ
the teachers begin to hear a demand that they stay behind to ke
tion schools for the children who cannot leave.

It is often of more consequence to find other wholesome occupa
the child than to keep him at school.

We must keep the two types of school clearly before our mind
conditions are essentially opposite.

In the typical coöperative school of a community of parents w
keep their children judiciously occupied under their own guid
school terms are shortened and their advantages are more highl
entering more completely into the home life than in the typ
school, where authority increases at the expense of coöperation,

natural tiresomeness of a child under long-drawn monotony takes on a degree of antagonism to the operation of the machine. The teacher who boards around in a poor district of New Hampshire or Pennsylvania can do more for the individual child to remember gratefully than a teacher in a great city.

The scholastic requirements for admission to West Point are the simplest used in any institution of high repute, and would form a suitable standard for the minimum aim of every boy and girl. There is hardly a corner of the land where an earnest boy could not get help enough to conquer them by the time he was seventeen, the minimum age, certainly by twenty-two the maximum, even if he worked on a farm or in a shop much of the time. The standards required by any other institution whose influence bears upon the vicinity could profitably be kept before all pupils who could appreciate them. The examples of noble men and women, standard works, and broadening opportunities are to be constantly exalted.

The country school does most for the nation in proportion to population and resources. It needs checking, rather than urging, in adopting city methods. The city type of school has done great harm by its certificates of studies completed. The country boy has left school knowing that he was ignorant, and therefore more accessible to the lessons of after life.

E. O. VAILE, of Chicago, said that superintendents and principals owe more attention and sympathy than they now give to boys and girls who in size have grown beyond their mates in the grammar school, and who, in consequence, feel so awkward and out of place in their proper grade, that they are very ready or even eager to leave school and what they consider its humiliation. The ordinary school-mistress is unable to maintain discipline without requiring these big ones to "toe the mark" in every petty detail, no matter how mortifying it may be to them, just as she does the smaller ones. It is for the superintendent or principal by personal acquaintance, watchfulness, and stimulus to counteract the natural effect of these conditions and exactions, and to hold these boys and girls in school. If they are thus retained, a large proportion of those who leave school prematurely will be disposed of.

He did not indorse the statement that average pupils can master the ordinary course at an earlier age than is now usual; that is, the various departments in arithmetic now come at about the proper time. At a much earlier age the ordinary pupil lacks sufficient maturity and grip to labor to advantage in, say, percentage or ratio. However, he was decidedly of the opinion that new subjects could be most wisely and profitably substituted for the profitless and burdensome work now done in all the subjects taught in the grammar grades. He instanced the prolix and mechanical work done in the long drill in fractions, using large numbers and purely hypothetical problems; the senseless multiplying of "cases"

and topics in percentage and its applications; the irksome and fruitless grind in grammar and so-called language lessons, where language is so generally made an end and not a means; the half hour or more spent daily from the first grade to the eighth in copy-book writing, which is an absolute waste after the fourth or fifth year; requiring pupils to copy problems and questions from the blackboard although the text-book contains enough of such material and in better form.

THE INFLUENCE OF MANUAL TRAINING ON HABITS OF THOUGHT.

BY SUPT. JOHN E. BRADLEY, MINNEAPOLIS, MINN.

It is difficult to trace formative influences. The forces which mold a character are manifold and often obscure. Blending with native aptitudes and hereditary tendencies, they yield widely different results under conditions apparently similar. Tastes and interests which seem permanent to-day may prove ephemeral to-morrow. Stimulating and ennobling influences are lost upon one, while a chance word or trifling incident rouses another to grand achievement. Time alone can determine what product the fair promise of youth shall yield.

In attempting, therefore, to estimate the relative value of various parts of our educational work, we have need, in the first place, of caution lest our predilections lead us to unwarrantable inferences; and, in the second place, we need that openness of mind which will enable us to recognize the excellences of any system of training. We unconsciously magnify that which is familiar, and we are slow to accept new truths and new methods of work.

I have therefore relied largely, in the preparation of this paper, upon the observations of those who are engaged in the work of manual training. I wish to report results rather than urge my own opinions. I have had before me the notes of eleven teachers engaged in various branches of manual training. Before I conclude, I shall quote some of their own words. I shall endeavor to reflect their views throughout this paper. Let me first quote from one who is not a teacher.

A recognized leader, who has had large experience in the business world, said a few days ago: "Education in books is only one-third of an education; education in the ways of the world and a knowledge of human nature is another third, and education or training of the will is the other third. To a large extent, it is only the first third which is given in the schools. Book education alone is too deficient and one-sided to accomplish anything in this world. Here is a man whose schooling was neglected or confined to a few months; yet he is very successful in business and a man of great influence. There is a college graduate whose life is a failure; yet he is said to be a man of considerable ability and has no very bad habits.

"You ask why is it that the man of so little education gets along so much better than the man with so much. You are simply mistaken as to which has the most education. The man who is almost illiterate has trained his

energy, perseverance, self-reliance, all the powers of his will, to a high degree, is well posted in the ways of the world, and has a thorough knowledge of human nature ; then he has two-thirds of an education. The other is lacking in these qualities, but he has a very thorough knowledge of books ; then he has a little more than one-third of an education. The education of each is deficient, neither has the education he should have, but certainly the college-bred man has the least."

Now, without stopping to reply to certain minor criticisms which will at once be made upon this utterance, I wish to inquire whether the one-sidedness which is here so graphically depicted must necessarily exist. Grant that the picture is drawn, as most criticisms of the schools are, by one who only knows of their work as it was conducted years ago, still is there not here indicated a great need in mental training which the schools ought to supply ? No previous decade has brought so many changes in educational work as have occurred during the last ten years. Most of them have been strenuously opposed by teachers and other friends of the schools. Progressive movements are often misunderstood. And yet so rapidly have our views changed with reference to the best aims and the best methods, that the teachers' meetings are now full of convicted sinners and new converts. Need, we then, be too apprehensive concerning further modifications in our work ? If an element of training can be added that will develop neglected powers, should we not rather rejoice ? Too much has been claimed for manual training by enthusiastic advocates; groundless fears and objections have been raised by its opponents. We need a new estimate, based upon experience and familiarity with the details of the subject. As we consider the influence of manual training upon mental growth, we need to look at the subject not with the eyes of the enthusiast and specialist, but from the standpoint of the teacher wishing to maintain due proportion in educational work, and to give due emphasis to that which is most important.

Among the various educational ends which are proposed, there is none upon which all are more fully agreed than the " Formation of Correct Habits." It is true that Dr. Johnson, fixing his attention upon the enslavement of evil habits, represents education as principally concerned that youth should be free from their power; and Rousseau, in one of his oracular utterances, declares that the only habit a child should be permitted to form is to contract no habits. But though moralists and teachers have thus often portrayed the dangers of evil habits, the world has come to see that man's safety and strength depend upon the establishment of good habits. The law of habit is the same as that of association. It indicates a tendency in the mind to repeat its activities, and with a constantly increasing facility. It is Nature's method of accumulation of energy. Education implies personality—the ability to assert one's self. Intelligence is not abstract and absolute ; it waits upon performance.

Habit gives ease and certainty. It not only lays down the lines of association, but it adds vigor to the will. The mind moves with greater promptness and force when sure of its way.

What, then, are some of the habits which the schools should cultivate in their pupils?

1. Attention. The child's thoughts flit from one thing to another, like a butterfly from flower to flower. He must acquire the power of concentrating them upon one object. There is a spontaneous attention and there is a voluntary attention. The child should learn in the schoolroom to prolong the act of spontaneous attention and add new energy to it by an effort of the will. This implies careful adaptation of the instruction to the capacity of the child. His powers of purely intellectual activity are feeble; his mind must be reached through the avenues of the senses. He is capable of observing individual objects, and his power of acquiring certain classes of facts is wonderful; but his interest flags when you attempt to *apply* your story, and he gets nothing out of the *relation*, which to you seems so important. To a certain extent this necessity of the child to think along the line of specific and tangible objects remains for many years. The full significance of abstract ideas is grasped very slowly.

A true philosophy of childhood teaches us, then, to supply, during the early years of school life, both objective teaching and manual occupation. Train the child to habits of attention by giving him employment to which he *can* attend. Horace Mann once said that if teachers would give one-half the school hours to creating a desire to learn, more would be accomplished than by giving all the time to book work. Primary teachers testify to the superior capacity of pupils who come from the kindergartens. The occupations which have trained the fingers and eyes of these little ones have also stimulated mental activity and given them power to think. The habit of attention must have its foundation in the activity of the senses. Vigor of thought depends upon interest. A primary teacher of large experience reports: "No exercises train children to habits of attention like those in which the hands can be employed. The best 'busy work' is that which gives the hands most to do. The kindergarten occupations train the mind even more than the eyes and fingers. The children learn to attend to the exact thing to be done." First of all, then, manual training has a place in the *primary* school.

2. Another habit which the school should cultivate is that of observation. The intellectual fabric must have a solid foundation in sense-knowledge. Crude ideas of what constitute observation are too prevalent. A teacher, for example, carries an object into the schoolroom, and, as she calls attention to its various features, the children look at them and try to remember them. It is called an observation lesson, and is perhaps useful. But something more is needed. True observation goes further. Suppose

now, that under the direction of the teacher, the children place different kinds of seeds on prepared paper or cotton and watch their germination and growth. Careful record is made in their little note-books of what they observe. They are permitted to ask questions; their curiosity and interest are encouraged, but they are not too freely told what they can find out for themselves. Now a valuable habit of thought is fostered. They learn to examine and investigate for themselves. They observe for a purpose. Still more beneficial is the observation required in constructive work, like making and fitting the parts of an article accurately and tastefully together. The acquisition of knowledge at first hand is needed for the best mental growth. The muscular sense should be developed and utilized. Manual training exercises conjointly the nerve-centers of the hand and eye, by which knowledge is primarily acquired. It is in the elementary and high school, what laboratory work is in the college. True observation has an end in view. Understanding alone is not enough. Intelligence is not merely a store; it is also perceiving power. Knowledge must be kept alive by new acquisitions, else it becomes as worthless as unused coin.

The child needs to handle colors, to place them side by side and select his own combinations. He needs to handle counters, weights, and measures. He needs to handle plants, and to make and record his observations concerning them. He needs to handle the various type-forms, to draw them, and make them of clay, paper, and wood. He needs to represent in drawings and in solids the facts which he learns in geography, history, and elementary science, and to relate this work to his language exercises. These are the ways in which observation is trained and thought stimulated. And the exercises which require the closest and most delicate use of the hand and the eye are also the ones which best arouse mental activity. They are especially efficacious in reaching dull and backward pupils. A primary teacher says: "My pupils attend more regularly since we have had industrial work. I have never known a child to be absent, except for sickness, on clay day or sewing day. This work is particularly successful with dull children." Another teacher says: "The work on cardboard is just the thing for backward pupils."

3. The school should train to habits of definite and accurate thinking. Such training must be largely indirect. Generalization and inference, no less than memory and imagination, depend upon clear perception. Sully says: "Thought will be loose and inaccurate when the preliminary stage of perception has been hurried over. The first-hand knowledge of things through personal inspection is worth far more than any second-hand account of them by description." Loose and shallow thinking must prevail where facts and relations are imperfectly understood. Every teacher knows how difficult it is to get pupils to clearly apprehend the exact thing which is to be done. Half of a class will raise their hands to answer, be-

fore they really know what the question is. They are ready to solve a problem or analyze a sentence before the teacher can state it. They feel no chagrin at mistakes, and hopelessly mingle thinking and guessing. What teacher has not been mortified and astonished at the mistakes of his pupils, misled by a sound or careless inference? The author of "English as She is Wrote" gives us many ludicrous examples. She tells us of pupils who believe that "the principal occupation of the people of Austria is gathering Austrich feathers," that "mendacious means that which can be mended," that "the best fossils are found in theological cabinets," and that "a court-martial means a man who goes around late at night." One bewildered child, mistaking the identity of the State of Virginia, declares that Abraham Lincoln was the "Mother of Presidents." These are only extreme examples of the use of words without thought with which teachers are only too familiar. Pupils form the habit of depending implicitly upon the text-book or the teacher's statement, instead of obtaining facts for themselves. Instead of growing intellectually honest and self-reliant, they grow listless. If a word is misapprehended and makes nonsense, it gives them no great uneasiness, because they do not really think about it at all. Manual training compels pupils to be accurate, to depend upon themselves, to consider before they act. A boy corrects an error in his arithmetic or algebra and thinks no more about it. He is used to such mishaps. But when he comes to similar oversights in the workshop, he finds that his labor is lost and his materials spoiled. He cannot afford to make mistakes. He quickly learns to work with his faculties alert. Manual occupations, from paper-folding to metal-work, require *thoughtful* attention. Dexterity of the hand implies a certain dexterity of thought which is acquired along with the manual skill. A primary teacher reports: "This work cultivates exactness and rapidity of thought. Unless a trained mind can be manifested by a trained hand, half its power is lost." A principal who has a great variety of manual work in his building says: "To my mind, the main educational feature in all manual training is the fact that a pupil's work is largely the expression of his practical and definite thought. Before a boy can *do* a thing he must have the idea of that thing clearly fixed in his mind. Careful work is always preceded by careful thought. The finished piece is a perfect picture of the mind behind it. Thus this training leads, I think, more directly to independent and original thought than any other training in our course of study. In much school work, pupils do not have an opportunity to think for themselves. Their originality is crippled by method and process. In this work the pupil has a chance to express himself in spite of precept or teacher."

4. The school should cultivate the æsthetic nature. No words of mine are needed to set forth the importance of this work. There is need of every influence which can be exerted to raise the popular standards of good

taste. Let more sunshine into the lives of the children. The reading lesson, the language lesson, the general atmosphere of the school, should cultivate refinement and love of beauty. Nearly every form of manual training helps in this work. Who can inspect good drawing, or clay work, or the pretty designs in colored paper, and question their value for purposes of æsthetic culture? The grotesque and incongruous disappear where such work is done. No pupil can construct a well-finished article in wood or metal without learning better to appreciate good workmanship. No one can execute ornamental designs in wood-carving or lathe work without gaining along with his skill in manipulation a corresponding delicacy of thought and feeling.

A supervisor of sewing says: "This branch appeals especially to the personal pride of girls, to their ideas of neatness, grace, and beauty. It has a gentle, refining influence, cultivates the habit of observation and practical thought, and trains to taste in the harmony of color, materials, and arrangement. The work in sewing means not merely so many stitches taken in the proper manner, but also training in refinement, self-reliance, and self-respect."

An instructor in wood-carving says: "Wood-carving, one of the most ancient of mechanical arts, has especial value on the artistic side of education. The requisites of success are an appreciation and study of plant forms and ability to adapt them to decorative purposes. Simple typical forms of foliage are taken for the first exercises, and the student soon recognizes the fact that all plant growth, while founded on certain geometrical forms, has an endless diversity in its development. The mere literal copying of natural forms is of little use for decorative carving, and their treatment in a 'conventional' manner must be considered. No rigid rules can be laid down. The skill and genius of the designer will be fully taxed. Every cut of the tool is a development of an original idea. This is education, pure and simple, as distinguished from the more literal reproduction of the work of others."

Can any one doubt the refining culture of such training as this quotation describes?

5. The school should be a place where pupils will acquire the habit of accomplishing something—a place for the training of the executive powers. Of what value are the "cunning hand and cultured brain" unless their owner uses them? A generation ago most boys and girls became practically familiar with some employment at home. The farmer's son and daughter both learned to work out of school. Their quick and accurate eyes were trained to observe every feature of an object. But nothing gives our modern city schoolboy any such opportunity. He does not even know the uses of so marvelous a mechanism as the hand. And this one-sidedness of his educational environment is a serious loss to his teacher as well as himself. Children gain the power of application very

slowly; too many, alas! never gain it at all. The world is full of men who have no power of persistent effort. They are intelligent enough to do good work, but they are restless and unstable. The schools should be places not only to inform the mind, but also to invigorate the character. To store the memory and train the reflective powers without arousing the executive faculties is like loading a steamer without providing engines and rudder. Indeed, the best training of the other powers is impossible if the will is neglected. The universal weakness of human nature, until trained and disciplined, is a tendency to do things imperfectly, partly from ignorance, partly from reluctance to make the requisite effort. The boys and girls in our public schools need to learn, more than any other lesson, the value of earnestness, of a great o'er-mastering purpose. Manual training strengthens the will. It gives specific direction and force to every mental act. The boy acquires in the workshop the habit of overcoming difficulties and persisting in an undertaking till it is crowned with success. He conquers his sluggish tendency to do things carelessly. He learns the lessons of industry, perseverance, and genuineness.

Let me again quote the testimony of a manual training instructor of large experience:

"When a boy has put a question to nature in regard to a matter which can only be answered through the aid of a compound microscope, and by his own application has obtained the information sought, rather than take it second-hand from his teacher or text-book, he has done something to entitle him to respect; and when he has chipped and filed a block of iron so well that no light shines under the try-square as he applies it to the faces and angles of the block, he has done something which requires patience, attention, and care. He can prove his work to be well done, and he has a right to be proud of it, for he is developing those qualities which go to make up the highest human character. It requires mind and will to do such work. Good intentions are of no avail unless the will is strong enough to carry them out. No other exercises of the school train to sustained effort like those of the workshop."

Another instructor in manual training says:

"After several years of careful study of this subject, it is my belief that manual training proves a more complete and thorough all-round education than studies which are purely mental. It broadens the views, teaches exactness, makes students practical and self-reliant, affords vent to nervous restlessness, and stimulates to industry and perseverance. It reaches some students who are not interested in intellectual work. I saw last summer most beautiful and artistic work in the free schools of the People's Palace, London, which was executed by students who had proved to be almost absolute dunces in classical and literary work."

In this connection we also note that the success of each pupil after leaving school depends largely on his will-power—on his ability to work.

While we would not teach trades in the public schools, this incidental benefit of manual training should not be overlooked, that the productive power of a workman is at once visibly increased by giving dexterity to his hands. The future leaders of our industries will receive their first training in the use of tools in the public schools. The highest mechanical and artistic skill is usually the product of early training. Intellectual and manual training are both needed to qualify a man for the position of foreman. When can the foundation of both these requisites be better laid than simultaneously in the public school?

Chauncey M. Depew, whose voice has been so often raised in defense of classical culture, said at the opening of the Drexel Institute: "Steam, electricity, and inventions have hardened the conditions of competition and multiplied indefinitely the number of specialties. In the briefest time, and almost without warning, we are brought face to face with the problem that education and prosperity, education and livelihood, education and morals, education and law, education and liberty are wedded together. Manual training solves the problem of labor and industrial development. It so equips the youth and opens avenues for his energies, that, instead of dynamiting the successful, he will be himself a success."

The demand for manual training is not ephemeral. Such magnificent institutions as the Pratt Institute and Drexel Institute illustrate both the wide-spread need and the clearness with which that need is seen by philanthropic men. It should be the part of the patriotic leaders in educational affairs to guide this great movement to practical results—to make it the means of infusing strength and interest into the work of our schools.

If now the value of this training be admitted, but the lack of time for it be urged; if it be said that our courses of study are already overcrowded, I will venture to quote once more from Dr. Johnson. Boswell relates that one day Mrs. Gastrell set a little girl to repeat to Dr. Johnson Cato's Soliloquy, which she went through very correctly. After a pause he asked the child what was the meaning of "bane and antidote" in the passage. She was unable to tell. Mrs. Gastrell said: "You cannot expect so young a child to know the meaning of such words."

He then said to the little girl: "My dear, how many pence in sixpence?" "I cannot tell, sir," was the half-terrified reply.

On this, addressing himself to Mrs. Gastrell, he said:

"Now, my dear lady, can anything be more ridiculous than to teach a child Cato's Soliloquy who does not know how many pence there are in sixpence?"

Our courses of study have recently been much improved, but there are a few Cato's Soliloquies still left. There are some teachers who still cling with pride to exercises which might better be spared. The good names of drill and thoroughness are made to cover much misdirected work. We

need more of the spirit, less of the letter, of these things. If manual training could crowd out some of the dreary repetitions which still prevail, it would be a great gain. If freedom and originality could take the place of slavery to method, if powers could be evoked which are now repressed, all would rejoice.

Already teachers and pupils feel that pressure is removed as the range of instruction is widened. Interest in the work makes it easier. Adaptation to the age, capacity, and needs of the pupils makes interest possible. Troublesome problems disappear as the schools become truly attractive. If we are now able to accomplish double the work in geography with half the labor formerly required, because our aims are better, let us not hesitate to welcome other changes which will increase the helpfulness of our schools. Let us remember with Lowell that:

> "New occasions teach new duties,
> Time makes ancient good uncouth."

Useless experiments need not be tried; good work need not be given up. But improvement is always possible, and vitality and progress should be steadily gained. The scope and methods of our work should be made more flexible. Provision should be made for the harmonious training of all the pupil's powers, and the people should have new reason for pride in their cherished system of public schools, because of their adaptation to the changing needs of society.

MANUAL TRAINING BETWEEN THE EMPLOYMENTS OF THE KINDERGARTEN AND THOSE OF THE TOOL LABORATORIES OF THE GRAMMAR SCHOOLS.

BY SUPT. W. B. POWELL, WASHINGTON, D. C.

FIVE years ago a small beginning in teaching the use of wood-working tools was made in the high school of Washington.

Gradually, from that time to this, new branches of work have been added, each of which, together with the one with which we began, has been extended, so that now manual training is recognized as a regular and permanent branch of education in all the schools. The manual training done in our schools, resulting from changes to which reference has been made, may be stated in a general way, as follows :

All the girls of the third, fourth, fifth, and sixth grades are taught sewing one hour a week. We are gradually introducing shops in which the girls of the sixth grade are taught to cut and fit.

All the girls of the seventh and eighth grades are taught cooking two hours a week.

All the boys of the seventh and eighth grades are taught the use of wood-working tools two hours a week.

All kinds of work thus far mentioned are practically compulsory, or as nearly so as is any other branch of the school curriculum.

The girls of the high school are not taught cooking, as it has been determined that the two years of instruction given below the high school are as much as it is desirable for the schools to give in that branch of education.

Boys of the high schools have one year at lathe work, one year of forging, and one year of machine tool work.

All manual training in the high schools is optional, as is every other branch of education with the exception of English.

The subject that I propose to discuss is not the one stated in the programme exactly, being stated better as follows :

Manual Training between the Employments of the Kindergarten and those of the Tool Laboratories of the Grammar Schools.

The manual training that is now given in our schools is very inadequately set forth in the foregoing remarks relating to the subject. It was

a comparatively easy task to project plans for giving instruction in sewing, cooking, and tool laboratory employments. It was not difficult, the financial means being assured, to provide and arrange appliances, and practically to put the work into the respective grades of the school. It was seen, however, at the start, though much might be done by the introduction of the employments named, to give to some of the children valuable training in the use of the eye and hand, and a profitable acquaintance with practical things, that such a course would be unsymmetrical; that it would postpone the beginning of some kinds of muscular training too late for the most profitable returns for a given expenditure of effort; that it would omit entirely some lines of desirable training because of its narrowness, and that children withdrawing from school during the early years of the school course would get little training of the kind we were seeking to give them.

It was felt that a year or two of kindergarten work at the beginning of school life and a corresponding amount of shop or laboratory work at the close would not develop to a very high degree that accuracy of perception, deftness of hand, and trustworthiness of judgment in application that a child's school training should give to him.

It was believed that the gap between the sense-training of the kindergarten and the use of carpenter's and metal-worker's tools in manual training shops might be filled by a system or course of hand-work in the schoolroom running parallel with the purely mental studies of the curriculum of the same grades; that such a course should, by its many and varied employments, develop the eye, the hand, and the judgment in the direction of expertness, facility, and reliability; that definite, measurable results in skill, in ingenuity, and in continuity of effort for the accomplishment of purpose should be the aim of all teaching in this course of work; that the objects studied and formed might serve as a foundation for or be the beginning of other kinds of work in the school, and for supplementing, broadening, or explaining still other kinds of work; that such a course, if practicable, would be in the interest of economy.

Since the beginning of manual training exercises in our schools, therefore, efforts have been made to arrange some practicable lines of hand-work that should begin in the first primary grade and lead sequentially to the employments of the tool laboratories of the seventh and eighth grades, for the boys, and that should be equally profitable to the girls who would be instructed in cooking when reaching the same grades.

Drawing was at the time mentioned a branch of instruction in the schools. It was determined that the subject could not be taught well from flat copies. Though we had not been able, previous to the time to which reference is made, to direct the work of drawing in the light of our best knowledge, it was known that only by a liberal and intelligent use of objects by which children could be made acquainted with natural and

art forms could drawing be successfully taught. It became more evident every day, as the work of teaching drawing was studied, that representation even—the simplest product sought by the study—could proceed only from an accurate knowledge of the facts of form ; for, however appearances of forms might differ from the facts, the underlying causes of the differences could be understood only by him who had been made acquainted with the facts.

Furthermore, when contemplating the purpose of the study higher than that of simple representation, it was believed that as a healthy, productive imagination could be cultivated only after there had been acquired a store of facts well understood ; so artistic work could be done by him only who would fashion his art out of materials taken from his own conscious storehouse of facts whose relations were understood.

It was agreed, therefore, that if the child is to be taught drawing at all, no matter for what purpose, first of all the teacher must see that he has abundant opportunity to learn form-facts, and that, as in the study of spoken or written language, so in his study of drawing or of graphic language, he must be made to know before an attempt is made to teach him expression. An important step forward in the teaching of drawing was made when this almost axiomatic truth was recognized.

It was believed, also, that facts of form could not be learned from dictation or from representation, or from both.

Children learn to know forms only imperfectly by seeing them and handling them ; they get correct, permanent conceptions of form best by analysis and by construction, by making them of different sizes and of different material and under different circumstances and for different purposes.

It requires the action of one set of nerve centers excited by the eye, coöperating with other sets of nerve centers excited by muscular action of fingers and hands directed by the will, for the establishment of correct, permanent concepts of form. Concepts are built.

Form study and drawing are sequential steps for beginners ; form study being the first, drawing being the second. Form study is a prerequisite to drawing. Manual training is one of the two coördinate parts of form study. Manual training, then, and drawing are as inseparable as are ideas and words in the study of verbal expression.

A study of color cannot be separated from that of objects and their appearance. This is true in an especial sense of all objects in plant life.

A most important educative purpose of learning to represent objects as they appear, or seem, is that the learner may acquire power to see objects in flat representations of them as they are, and not as they seem to be, just as learning to represent phenomena of physical geography in sand maps, and afterwards in flat maps, is to train the learner to see contour in flat maps. As he who has thus been trained to make flat maps can read con-

tour in the flat and represent it in sand or some plastic material, so will he who has been taught to draw properly be able to draw objects as well from flats as from life.

Such perfect seeing as is here implied requires a knowledge of color corresponding to that of form given in the foregoing and as a part thereof. The changes in the appearances of color under influence of light and shade, of distance, and of environment may be understood by him only who studies the subject in connection with the study of forms of objects under varying circumstances.

The difference between the forms of objects in a picture, as they are and as they appear to be, is the personal equation of the picture. What is true of pictures is true of all art products.

The ability to see the objects of a picture as they are, and thus separate them from what they seem to be, is the ability to see the artist in the picture, and hence the art.

In this work, so necessary to correct, profitable instruction in drawing, is found an opportunity for the training of the eye, hand, and judgment simultaneously. In these employments, the study and making of geometric forms, of natural forms allied to them, and of art forms developed from them, and of common objects whose forms are based on them, is in part the work for which we have been seeking. What an amount of profitable seeing is here made possible! What employments for the acquirement of deftness and reliability in the use of the hands and fingers! What delightful exercises for the development of judgment and taste!

Drawing was selected as the branch of study along whose lines of work related to them might be found those employments of mind and hand that would afford all the training desired to make the manual course of the school symmetrical and a unified entirety.

To Mrs. S. E. W. Fuller, the directress of drawing in our schools, and her corps of assistants, is due the credit of adjusting the technical work of the different kinds of employments to the grades of the school.

Apart from the strictly practical sense and hand cultivation, much may be done by this work to assist the æsthetic and the moral growth of the child. The study of graceful forms and harmonious coloring will stimulate a love for the beautiful and appropriate which will leave its impress on all the work of the hand.

In his home, in his dress, and in the products of handicraft, good taste will guide his choice of form and color, and thus render the world brighter and pleasanter both for himself and for those about him. The appreciation of the beautiful and of the pure and chaste go hand in hand, and will keep the mind and heart ever with higher and nobler things.

From the kindergarten through the high school, the pupil should be kept in constant association with the object world about him, that he may

acquire knowledge of its structure and the laws governing its appearance. Without this knowledge of his environments, he is but a stranger in the garden of God. By the proper study of geometric solids and planes, and of forms related to these, he will acquire, through the natural avenues of acquisition, sight and touch, a comprehensive and classified knowledge of all forms.

To the little child the form world must ever remain a perplexity until he has been led to a classification of its variations.

The general purposes of the course of exercises developed are as follows:

1. Storing the mind with true conceptions of forms and colors, and developing the ability to acquire new concepts.
2. Developing the ability to select from masses of materials that which is appropriate for specified or desired purposes.
3. Directing the attention to the essential elements of the beautiful in nature and in art, neglecting in such attention the accidental, thus developing the beginning of an artistic standard.
4. Training the hand to use, shape, and arrange materials with neatness, accuracy, and taste, that the learner may express artistically; *i. e.*, with truth and beauty.
5. Teaching the use of tools adapted to the age and strength of the child and to the character of materials employed.

CLAY.

"There is no other material like clay for bringing the mind down to the fingers."

The handling of perfect models of geometric forms may be followed by making them in clay. Natural objects whose forms resemble these are next made. Then objects whose forms are derived from these may be made. The objects to be copied are so easily obtained that every child can have a model on his desk for study.

The amount of work possible here at the very threshold of form study is practically without limit.

The clay soon becomes a ready material in which to fashion forms with which the eye is delighted and the mind interested. As from the making of apples in clay, to distinguish them from oranges, lemons, or pears, the child gives you the likeness of the individual apple on his desk as distinguished from other apples, he begins to notice particulars in everything he looks at. He is beginning to notice appearances of objects, too, more closely.

He gives you the likeness of a half apple, on which you are delighted to see the skin stand above the pulp which has been wasted away by evaporation. He is beginning to see details of form. The amount of work possible here, too, is practically without limit. He studies roots, stems,

leaves, flowers, branches, for science work and as a means of language training. He will get better science training and better language training if he is made to see particulars and to represent them both in clay and in words.

This work is not simple representation of forms. The child is to see the stem dimple of the apple and know its relation to the branch on which it hung; he is to examine the blossom dimple of the apple and understand its relation to the blossom whence it came, that there may be thought in the mind before the building of form begins, else how can clay bring thought down to the fingers? When knowledge and muscle coöperate in making natural forms, there is more in the product than shape.

From the modeling of nature forms the learner, while yet in the fourth grade, may pass to the representation of objects from working-drawings, modeling to dimensions. In this the use of tools may be allowed and encouraged. The child should ascertain for himself the dimensions of the objects to be made. This will train his judgment and give him skill in doing accurate work.

He may incise ornament designs in clay plinths, and on other plinths cut away the clay from the drawn forms, leaving the ornament in relief. This develops careful workmanship with tools. If while working in clay the child passes to the study of historic ornament, he finds a limitless field for the exercise of mind and hand. The more he knows of the origin of the graceful forms and of those who originated them, the more he knows of the uses to which they were put and how they have come down to us, the more form he will see in them. Let him model these from the casts and let him model them also from the flat, for he is strong enough to do it. In this work he may use tools both for measuring and for construct ing while doing the work. There is no limit to the original designing that may be done for production in clay forms.

While the child has been at work with clay during the six or seven years of school life he has been doing other kinds of work correlated with it.

TABLET AND STICK LAYING.

He lays tablets and sticks to get proper concepts of surfaces and of edges. Before this can be done satisfactorily to the child who begins really to see form, the hand must acquire much steadiness. This is manual training.

PAPER FOLDING.

The child continues the study and making of geometric forms and developments from them, and representations of art forms based on them, by folding colored paper and cutting it. After the forms are cut they are

pasted on cardboard or stiff paper for preservation that they may be drawn. The number and variety of forms and the purposes to which they may be put in ornament and in uses is innumerable. The work, proceeding from the simple to the complex and compound, develops deftness of fingers and continuity of purpose. The use of tools appropriate to the work is also taught.

MODEL MAKING.

The child easily goes from making forms by folding paper to the making of objects of stiff manilla paper or cardboard. For these he makes the working-drawings to measurement, after sketching the object and one of each of its different faces.

This is done by the shop method, involving the use of tools and demanding careful, accurate work. The amount of work that may be done in this branch of employment is practically without limit. It is most valuable for teaching the relations of the different dimensions of solids as a foundation for art study, and for supplementing the work in arithmetic as no other kind of work can do in this line. The child passes from the making of these working-drawings to making others for exercises and objects to be made in the shops with wood-working tools.

COLOR.

While pursuing the lines of work indicated but inadequately in this brief paper, the child has been learning color. The paper that he has folded and cut, as well as that he has made into solid forms, has been so selected as to teach him the relations of color to light.

Color having its origin in light, the colors composing the light are deemed a proper basis for the study. From the observation of the spectrum the child is led to notice the colors of the rainbow, of the plant world, the blue of the noonday sky, the red and yellow of evening, the green grass, the violet neutral tints of the roots and soil beneath his feet. The study of the hues of nature awakens his color perception and brings him into sympathy with the whole realm of color.

A complete development of the subjects requires representation by washes in water colors. This has been done in many of the schools. The child has had washing tints of primaries in squares of paper; coloring decorative arrangements around a center, and borders; mixing secondaries, and washing in tints of secondaries. This work correlates with the paper folding, the paper model making, but more especially and delightfully with the study of leaves and flowers.

The color work of the schools is not yet fully developed.

DRAWING.

Parallel with these lines of work, supplementing them and auxiliary to them, the child draws. He represents all he handles and studies in the early grades of the school; and he makes representative specimens in the later years of his course. In the beginning he draws only what he sees; later he draws the forms of what he is to make, as well as the working-drawings for them, and the patterns for them, before he makes them.

He has been learning to see fully and accurately; he has also been learning to represent truthfully.

LANGUAGE.

In all the work the child represents what he sees and what he does, in good English idiom.

This is no small part of the purpose of the work. He has learned the relative value of word representation and of graphic representation, and learns to employ the two when one is inadequate to show what it is desired to express in its exactions.

ART.

The child in all this correlated work has been developing the art sense, the art feeling, and the love of art.

He is learning what art is. Throughout the work he is led to invent by change of form and by composition of form. He is led to study the need of decoration, the purpose of decoration, the character of the thing to be decorated, and the kind of decoration suited to it. He is led to get motives from nature, from art, and by composition. He is taught, by doing, the art principle, selection.

As conceptions of forms and colors increase, more attention is given to the development of the power of selection and arrangement. This is done in the grouping of fruits and vegetables for object drawing; in the adaptation of units to space; in the selection of suitable curves to modify such units; and, lastly, in the use of natural forms by seeking for the type form, deciding which type form is best adapted to the space, and rejecting details that interfere with the conception of this form as adapted.

The child is early led to apply the law of selection to what he does, which is discriminating between the principal, or the essential, and the subordinate, or the non-essential. The artisan, the artist, and the author, alike, must, to succeed, skillfully apply the law of selection. It distinguishes between the necessary and the accidental, between the essential elements and those that are ornamental, auxiliary, or complementary.

The beginning of power to select appropriately marks the birth of the artistic sense. Its correlated applications are the beginnings of judgment in other affairs.

The details of the course of training that is here suggested may be modified to suit circumstances or tastes, or both. Such a course affords all employment in handicraft that the schools of the grade for which it is intended will have time to give. It exercises the eyes and hands for the development of accuracy in seeing, and skill and dexterity in doing, and for the acquirement of definite valuable knowledge; its steps are sequentially graded and its employments logically grouped; it furnishes employments suited to the intelligence, size, and strength of pupils, and is practicable in schools where pupils do their own work; it is done with tools which adults would use for the same purpose, and it is therefore in no sense adapted or play work; it supplements by the investigation it requires into nature and into historic facts, as well as by its treatment of them, and thereby enriches most or all the other studies of the grades in which it is done; it provides a means by which the future artisan may lay a faultless foundation for a meritorious, delightful, and profitable handicraft, and at the same time it provides the only means by which it is possible to develop true art.

The schools of those grades in which this work is done give the same scholastic training to pupils who are to be laborers, business men, and professional men. That is the theory of popular education. Upon no other theory can the public free school stand.

In a corresponding way the schools may provide the early sense, hand, and judgment training for the unskilled laborer, the artisan, and the artist, as well as for him who will be neither of these.

One purpose of art teaching in our schools is to make a constituency for better workmanship and for artistic products of the artisan, as well as for art products. For the development of artists we are content to labor and to wait. A general demand for a higher grade of workmanship by the artisan will secure it. This, while it will be the evidence of an advancing civilization, nourished and stimulated by the gratification of its own demands, will develop a national standard of handiwork and later on a national idea of art.

Thus is it possible to develop a system of instruction which will give fullness of life in all its modes—life physical, life intellectual, and life moral.

The following schedules show what is being done in the city of Washington, D. C.

SCHEDULE A.

SUBJECTS.	GRADES.							
	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh	Eighth.
Drawing:								
Pencil drill	×	×	×	×	×	×	×	×
From construction by the pupils	×	×	×	×				
From made objects	×	×	×	×	×	×	×	×
From nature	×	×	×	×	×	×	×	×
From original designs					×	×	×	×
From ornament from the flat				×	×	×	×	×
Working-drawings					×	×	×	×
Geometric problems							×	×
Modeling in clay:								
From made objects	×	×	×	×				
From nature	×	×	×	×	×	×	×	×
To measurement and from working-drawings				×	×	×	×	×
From the cast							×	×
From original designs							×	×
Carving in clay:								
Ornament from the flat, incised					×	×	×	×
Ornament from the flat, in relief					×	×	×	×
From original designs					×	×	×	×
Construction with other materials:								
Sticks	×	×						
Paper folding and cutting	×	×	×	×	×			
Development in paper from working-drawings	×	×	×	×				
Designs, applied:								
To clay					×	×	×	×
To paper construction					×	×	×	×
To cloth					×	×	×	×
Language	×	×	×	×	×	×	×	×
Color	×	×	×	×	×	×	×	×

SCHEDULE B.

Tools and Materials in the Hands of Children.

GRADES.	Clay.	Sticks.	Tablets.	Pencil and paper.	Colored paper.	Heavy manilla paper and cardboard.	Tools for modeling and cutting.	Mucilage.	Scissors.
First	×	×	×	×	×			×	
Second	×	×	×	×	×			×	
Third	×			×	×			×	×
Fourth	×			×	×			×	×
Fifth	×			×	×	×	×	×	×
Sixth	×			×	×	×	×	×	×
Seventh	×			×		×	×	×	×
Eighth	×			×		×	×	×	×

DISCUSSION.

PAPERS READ BY SUPERINTENDENTS BRADLEY AND POWELL.

[REPORTED BY SUPT. L. H. JONES, INDIANAPOLIS, IND.]

MR. W. E. SHELDON, of Boston: I would like to ask Mr. Powell, whether the schedule of work just given refers wholly to the primary school, rather than to the kindergarten.

MR. POWELL: It does. The kindergarten prepares the way for it.

MR. SHELDON: During the modeling exercise would you have the original model in the hand of the child?

MR. POWELL: Certainly.

MR. SHELDON: In the upper grades might not the instruction from the model be so thorough that during the exercise in modeling it might be withdrawn from sight?

MR. POWELL: Yes, sir; though such result is rather the end of such education than one of its preliminary steps.

MR. SHELDON: I think it necessary to insist on the perfection of the ideal or model in the mind of the child before he attempts to model it in clay.

MR. HAILMANN, of La Porte: I wish only to emphasize some points of the beautiful papers presented. The kindergarten should precede the school, and in the former these concepts are worked out in the plays and gifts and occupations.

The first thing in education is to give ideals. Froebel has shown that this is the business of early education. Manual training helps to give these ideals and to perfect the concepts from these. Manual training tends toward efficiency in education. It should be so used as to introduce purpose into the life of the child, and teach him to realize this purpose in some perfected work, making the purpose end in something outside of himself. It offers the best opportunity to fix for the child ideals of social attitudes and relations—ethical ideals—notions of associated effort. The work and play should be so arranged that the children will discover the value and necessity of associated effort—harmonious coöperation.

Not only the members of one class or grade should thus be led to coöperate, but the various grades of a whole system should be led to see ways of being helpful to one another.

This leads the child to see the essential unity of social ends and social

efforts, and fits him to live in the institutions into which he must pass when he leaves school.

Not only must the child thus work for another, setting his aim outside himself, but he must be taught to put something of himself into his work. No dictation exercise should be complete in itself, but should rather be a stimulus to the child, that he may make something of the material given him by dictation.

MR. POWELL: The distinguished gentleman has, in my opinion, shown beautifully how manual training lays the foundation for everything else. The participation of the child in setting social aims and in helping to realize these aims in action interprets history to the child by making him a participant in its very elements and beginnings.

MR. WHITE, of Ohio: I am glad that we are now agreed that drawing is the central thing in manual training, and that everything else is valuable more or less as it contributes to the perfection of the drawing.

It is a mistake to assume that we draw geometrical solids for the purpose of learning the concepts of these solids.

The concept is an antecedent necessity to the drawing itself.

Much of the drawing is so poor that it tends to blur the concept already fairly well formed. Much map drawing is so poor as to confuse outlines rather than make them clearer.

Another thing: the end of education is more than the training of the hand. Too much has been made of manual training. I shall not be surprised if some ardent enthusiast should soon claim that the only way to heaven is through the hand. This is about the only thing not heretofore claimed for manual training.

SUPT. A. P. MARBLE, Worcester, Mass., commended the moderate tone of the papers of the evening; and he thought the extravagant claims for this kind of instruction, at first made, are not often put forth at present. He found little to object to in the papers. They do not assume that manual training is the *sine qua non* in any good school, or that no school can be of any value without that training.

Drawing, paper cutting, box making, and work in clay, are all here regarded as part of manual training; and to these we might add writing and a part of what is called physical culture. For such a noble institution as this in which we are met, and for similar schools founded by the wise munificence of far-seeing men of wealth, intent upon the beneficent administration of their own estates, we can utter no words but those of praise. The good which these schools have done, and will do for generations yet to come, is incalculable. It constitutes a monument to the founders more enduring than imperishable brass.

But in this discussion there has been a hint of a false standard of

success in life. Opinions have been quoted which imply that success is to be measured by ability to amass wealth—that the almighty dollar is the one thing needful. Do we not rather wish so to conduct the education of the young that they may grow up feeling that noble character, conquest of self, the consciousness of God-given powers growing stronger by use day by day—the being a man, in the breadth of all which that implies—that this is an aim and an end, and not the mere getting of money? Let us not teach them to worship the golden image which the Nebuchadnezzar of this generation has set up.

MR. POWELL (in closing): I am glad to be able to repeat now what I said on the occasion referred to four years ago. I said that science teaching has come and changed the whole purpose and method of university work. The kindergarten has come and is changing the purpose and method of primary teaching. Manual training has come to change the purpose and method of the grades between the primary grades and the university.

MR. BRADLEY (in closing) said that he would not detain the audience at so late an hour to reply to anything that had been said, or to offer any new suggestion. He recalled the meeting four years ago to which Supt. Marble had referred. He recalled the apprehension then expressed, that the movement to introduce manual training into the schools meant the displacement of their established work by the introduction of crude and impracticable schemes. It was then feared that a fruitless attempt was to be made to teach trades and industries in the schools, while their legitimate work in training the mind and character was to be crowded out. The discussion this evening has shown that such apprehension has been dissipated by experience and greater familiarity with the subject. Those cities which have made the greatest progress in the incorporation of manual training into their courses of study have found that it brings, not weakness, but strength. Trusted friends of the schools, who earnestly opposed manual training four years ago, now believe that, wisely directed, it will train neglected mental powers. He congratulated the department that all had been able practically to unite on so important an issue. The only questions now are those of method and detail. Experience has demonstrated the educational value of manual training. He believed it would also demonstrate its practical utility. It now remains for the friends and advocates of the new work to guide it wisely, and to protect the schools from mistakes and excess. Among the various means which are now proposed for enriching our courses of study, none is more promising, educationally and practically considered, than a judicious training of the eye and the hand, along with the education of the intellect and the heart.

THE HEALTH OF SCHOOL CHILDREN AS AFFECTED BY SCHOOL BUILDINGS.

BY G. STANLEY HALL, PRESIDENT OF CLARK UNIVERSITY, WORCESTER, MASSACHUSETTS.

[AN ABSTRACT.]

THE development of education in nearly every country of the world in the last few years has been amazing. Not only in civilized, but in lands till lately uncivilized or half-civilized—in New Zealand, Algeria, Finland, as well as in India, South America and Japan—schools and school systems have become methods of colonization and of political influence. They now do the pioneer work once done by missionary preaching; and even the missions of the world are more and more teaching stations. Schools have a control over the bodies and minds of children five or six hours a day, for five or six days a week, which is greater than the control ever exercised by any other institution in history. Schools are uniformizing the knowledge and the sentiments of the world: men of all creeds, races, ranks, those who differ in everything else, unite in believing in the efficacy of schools. This is a *consensus omnium gentium* which the mediæval church long sought, which philosophers have postulated, and is now more practical and comprehensive than either have ever dreamed. The modern school is thus in a sense a church universal, and has all that deep consecration of a belief—a love now well nigh universal.

When a child begins to go to school the change of his environment is very great. Instead of constant activity, he must now sit still and keep still; instead of moving his hands and arms freely, the strain of effort is now focussed upon the very few, tiny, pen-wagging muscles. The eyes, instead of moving freely, are confined in the zig-zag treadmill of the printed line. It is no wonder, therefore, that the child so commonly loses weight on first entering school; that short-sightedness and other eye troubles increase almost regularly through the school period; that headaches, anæmia, scoliosis, defects of development if not signs of disease appear in stomach, heart, and lungs, and especially in the nervous system, the gradual deterioration of which is so hard to recognize (see the well-known works of Hertel, Key, Warner, Cohn, and others). If the school is tending to physical deterioration and toward a sickly age, as certain mediæval institutions are said to have caused the dark ages and the plagues, we ought to know it. The school ought to develop a sound mind in a

sound body; for what shall a man give in exchange for his health, or what shall it profit a man if he gain the whole world of knowledge and lose his own health? I hold that it is not too much to say that everything about the school—building, seats and desks, hours, subjects and methods of study—should be determined primarily with a view to health, on which, especially in children, even morality so largely depends.

In much of what follows I am immediately indebted to the studies of Dr. William H. Burnham, who has devoted the entire year in his course of Pedagogy at Clark University to hygiene, and who has allowed me to examine and condense his far more extended and detailed studies, a part of which are now in press for the "Pedagogical Seminary." Of his studies, much of what follows is simply a digest, and to these the reader is referred.

The body of the growing child is a mazy federation of cells, freighted by heredity with reverberations from a past, the remoteness of which we can hardly conjecture. It is so infinitely plastic that there is nothing in the environment that does not affect it. Every effort of thought modifies the temperature of the brain, and every effort of the muscles increases the products of waste and modifies circulation, while fatigue and all its demoralization is always lurking to prey upon the body and mind. Yet so little does science know of many of these problems that the body might almost be called a laboratory marked "No admittance;" while for the average teacher the ignorance of the psycho-physic organism of the child is profound.

The schoolhouse, which has been called more important for the development of the average child than the home itself, ought to be a palace of health. I proceed to sketch very roughly the salient points culled partly from laws, which are far more detailed in Europe than here, partly from norms recommended by educational bodies, and partly from ideals described in various books.

A. *The Site.*—This should be high, dry, a natural and not artificial soil, with no foreign matter in it; is sometimes tested by boring; marl, lime, or sand ingredients being good, and clay bad. It must be remote, if possible, from liquor saloons, the noise of machinery, offensive or unwholesome odors, marshes, ponds, graveyards, dust, or any form of nuisance or danger, and the street should, if possible, be asphalted near it. One norm prescribes that the distance of the schoolhouse from all other buildings should be twice their height.

B. *Yard.*—This should be enclosed by a hedge rather than a high wall, or by some transparent enclosure, that children may see the life of the street, and that all passers-by may see and be interested in the children, their play, and the school. The yard should be a porous earth rather than brick. Some norms prescribe three square meters per child as the minimum. Sheds for play in rainy days, often with glass roofs, are very

common, especially in France. A few simple, permanent pieces of gymnastic apparatus are perhaps more common in Germany. In more rural districts school gardens containing a few medicinal plants, and even a few poisonous ones to be avoided, flower-beds, a bee-hive, a tiny hot-house, and even individual beds for children to be responsible for, etc., are often found.

C. *Basement and Walls.*—All the building should be undercellared; should never contain water-closets; janitor's quarters, especially pantries, should be separated from the rest of the cellar by tight walls; the floor should be cemented; the basement should be kept. scrupulously clean and well ventilated, and more or less heated. Some norms prescribe a water-table all round the building, a meter wide and plastered, to prevent the ascent of ground moisture. The walls should contain plenty of air chambers, and be strong enough for an additional story. Steps up to the building should always be protected above and on the sides, or, better yet, within the walls.

D. *Floors.*—The lower floor, for the youngest children, should be at least a foot or two above the street level, should be of boards neither too hard nor too soft, but splinterless. Hamburg legislates on the cracks in the floor, which have been found to contain almost as many bacteria as the filth under the finger-nails of children. The thickness of the floor boards should bear a fixed ratio, often prescribed, to the distance between the joists. There should be no dry sweeping, and the floor might sometimes be washed with a weak sublimate. Some ideals avoid all corners and angles by means of curved moldings such as are sometimes found in hospitals. All ceilings should not only be double, but should contain sound-deadening layers.

E. *Halls and Stairs.*—The halls should be wide, light, well ventilated, so that not only clothes-racks and umbrella-stands can be placed in them, if necessary, and sometimes bookcases, etc., but that exercises may be held in them. This is, of course, quite ideal. The stairs should be at least a yard and a half wide, with steps broad and not too high, and corners not too sharp. The stairway should always be broken by one or two landings, never circular; should be of brick or iron, or some fireproof material, should have hand-rails on both sides, should be light, warm, and ventilated.

F. *The Schoolrooms and Windows* should contain no posts or pillars, should be from three to four meters high; the walls of the room should be of some mild color—light blue, green, yellow, or gray. If a wood finish can be afforded, pipes for gas and water, and electrical and other connections, should not be covered. Some laws prescribe the proportion of length of room to its breadth as two to three, some as three to five. The ratio of the window surface to the floor has been regulated by many laws, and in point of fact has been found to range from one-third to

one-ninth. There is little uniformity as to exposures, but south and east seem on the whole preferred. There should be no direct or reflected sunlight. Windows in front of the pupil are worst, those behind better, and windows on the left of the pupil are preferred. Windows should be openable,—a horizontal axis preferred,—should go to the ceiling, and be square and not curved at the top. The height of the top of the window should be at least three-fifths the width of the room. The bottom of the window in one norm must be a meter and a quarter above the floor; another law prescribes a minimum distance of one and a fourth meters between windows, but they should be as near together as possible. Dr. Cohn thinks that each child should see the sky from his seat, and has devised an instrument to determine the amount of sky visible to each child. He would have a photometer used in each schoolroom, and suggests, as the norm, what would be equivalent to the reading of good diamond type at a distance of ten inches. The door should be a meter wide, never behind the children, should open outward, and should have a transom. The cross piece bearing the number of the room should be as high as the eye of the average child in that room.

G. *Heating and Ventilation.*—I am inclined to agree with the sentiment of Dr. Burnham, that whoever says that any existing system is superior to all others is either uninformed and crotchety, or else an agent. Architects, as a rule, know almost nothing of heating, and still less of ventilation. It is these matters in which false economies are most often practiced. Living, as we do, at the bottom of a sea of air, where it takes as much force to move 100 lbs. of air as it does 100 lbs. of iron, we forget too that each day has its own problem. Many an excellent system is quite ineffective because not well managed through the ignorance or carelessness of a janitor. To change the air in a schoolroom completely once in every twenty minutes or half-hour, as should be done if each child has on an average only 1½ square meters of surface and five cubic meters of air space, is a very grave problem. The "school smell," and the injury foul air works in the blunting of faculties and the deterioration of tone, is due not so much to the carbonic acid as to the organic matter in the air of which this in the index. One ideal system is heating at frequent intervals all over and through the floor, with gratings and pockets to prevent the ascent of floor dust, by a central system regulated by thermometers in each room, with electrical contact shutting off or letting on heat automatically—a system, however, involving great expense, and therefore not generally practicable. Jacketed stoves, with air coming directly from out-doors, are used in country schools. Open fire-places with their great waste are now sometimes resorted to in despair of a better system. This whole matter is a very complex bundle of problems in physics, as yet but partially understood, and still less often well applied.

H. *Cost and School Architects.*—The German Government prints once in ten years an account of all educational buildings of all grades, each of which is described in tables of fifteen columns. An interesting method of presentation here found is to calculate always the cost of the entire building per cubic meter, per square meter, and per child, and also the cost of heating, ventilating, and plumbing per cubic meter. Educational architecture in Europe, while not exactly a vocation by itself, has an increasing number of experts, and has a vast and rapidly accumulating literature.* Within the last decade and a half the number of buildings erected has been enormous; a single *lycée,* recently finished in Paris, cost nearly two and a half million dollars; a single university building in Vienna, nearly four million dollars; and for all grades of education the present might almost be called an architectural epoch. Even very special institutions, like school baths, school dormitories, eye clinics, school and university gymnasia, have elaborate laws or norms full of details and specifications, while the views of the tax-payer and the doctor, which are perhaps most opposed on the question of expense, are complicated and confused by the traditions of carpenters and the ideas of convenience by teachers.

I. *School Seats and Desks.*—These are most important for the child. Sharp corners and angles must be avoided; the teacher desires convenient visibility of as much of the child's body as possible, ease and quickness of getting in and out; while the doctor insists on adjustability to every part of the body with severely orthopædic exactness. Before Barnard's epoch-making work, which prompted a German writer to say that the school desk was the only contribution of America to pedagogy, seats sometimes ran around three sides of the room, so that the children sat with their backs toward the center and must swing their feet over the seat to get out. In Freiburg, where many thousand children were lately measured, the difference in total height, and the way that the total height was distributed between back, legs, etc., was found to vary. Thus, the method of marching before a scale, in the presence of the janitor, the numbers on which designated the seat proper for each scholar, seemed inadequate, convenient and rapid as it is for approximating a fit for seats. The body should be held upright, in a healthful, symmetrical position, with least muscular effort. Seats which favor bad positions tend to lateral curvature of the spine, and interference with the functions of chest and stomach. The desk should overlap the seat by an inch or two; that is, the so-called "distance" should be minus. When the lower leg is at right angles to the floor, and the foot rests squarely, the lower part of the upper leg should touch the seat with the lightest possible contact. The distance from the seat to the floor is not the same for two persons of the

* See "Pedagogical Seminary," Vol. I. No. 3.

same height, and foot-rests, both horizontal and inclined, are very common in Europe. To get the distance from the top of the seat to the top of the desk, the child should sit erect, and the distance from the seat to the elbow, plus 2 inches, is a common rule. The ideal seat and desk are of course adjustable to fit each child, and children should be re-seated two or three times a year.

J. *Writing.*—This is the most important question of school orthopædics, and concerns especially the spine and eye. The position in writing now much commended in Germany is perfect uprightness of the body, both arms resting symmetrically in front and upon the desk about two inches from the elbow; the copy-book square and in the middle, not slightly to the right, and not obliquely to the edge of the desk. The new vertical script now introduced, either as an experiment or permanently, in a number of places in Germany (Vienna, Bavaria, Würtemburg, Bohemia), brings the pen on the down strokes perpendicular to the line, and the line is a very short one. [Samples of these copy-books were shown.] Paper straight, writing straight, body straight, is the motto of this script of the future, and indeed of a not very remote past. It is easier and more rapid. One observer found that over ninety per cent. of the children, when required to change from the old method of writing to this, straightened up the body, and when changed back to the old script, fell into the "collapsed" position, and twisted the head so as to keep the axis joining the two eyes perpendicular to the direction of the down stroke of the pen. This latter position brings the eyes to unequal distances from the letters, and, some think, is distinctly productive of optical disorders. The new vertical script favors an engrossing pen with no sharp lines; the pen must point toward the elbow, which must be held one hand's breadth from the body; the pen must be grasped at a good distance from the point, the hand supported by the side of the nail of the little finger. The line is only from eight to ten centimeters long, and the paper must be pushed up after each line. One writer says he can always tell by the position of the body what script is used. One of the worst positions ever devised is one which has been introduced in some parts of this country, that requires the child to sit with its right side to the desk, and the left turned away almost at right angles to it.

K. *Reading Hygiene.*—The zig-zag of the eye in reading lines and discriminating letters throws great strain upon the nervous centers involved. Many of our reading books are now printed in very good type, but dictionaries, atlases, and maps are often wretched. Cohn, and especially Javal and Sanford (see *American Journal of Psychology*, Vol. I. No. 3, on the "Relative Legibility of Letters"), have made very careful studies of this subject. The scientific problem is, how to secure the greatest amount of legibility for a given surface, without interfering too much with the traditions of type-makers or of readers. The forms of a few letters, like the small

"e," which has a very low degree of legibility, and is confused with other letters at the least distance from the eye, are very slightly changed, as are the common rules of spacing, and all with great gain to the eye. The latter moves along a line with its focus directed to the upper half of the letters, for in English it is in the upper half that the letters are chiefly distinguished from each other. The little lines in letters should never be less than a quarter of a millimeter in thickness. The lower lengths of the "j" and "y" can be slightly shortened. The line should not exceed ten centimeters in length, and new rules are laid down for spacing and leading.

I have spoken of but few points connected with school hygiene, and of these in the most sketchy and inadequate way. The subject requires a course of lectures, and there is nothing in all the school courses of study that should not be considered from the standpoint of health. Fatigue in school work brings not only distaste, but habits of inaccuracy and carelessness, and thus blunts the "school conscience." Burgerstein has shown by elaborate experiments and careful tabulation of the kinds of error made in simple arithmetical operations, based on the study of a large number of school children, that fatigue begins far sooner than was supposed, while over-effort brings increased speed of work, but greatly increased number and kinds of error. His studies are of great importance. Lakorsky thinks that the fourth hour is degraded in value 33 per cent. less than the first hour, by fatigue.

We know now that school children grow far more rapidly in certain years than they do in others, and that during the stationary years they are most liable to disease. It is possible that we may infer that during the growing years they both catch and originate the most new impressions and ideas, but are most easily injured by strain and fatigue. Again, we know that growth is greatest at certain periods of the year, and yet again that the body does not grow uniformly in all directions at once, but that the energies of growth are focussed now upon hands and arms and their centers, now upon chest and trunk, or face, or sex. Other experiments are showing us what are the most effective hours of the day for work. We are making progress in obtaining a table of normal interests of children. Just as the hand is dwarfed if too great strain is thrown upon it in drawing or otherwise, before its "nascent period," while it would thrive and grow strong under the same strain just after, so, if an interest is forced precociously, its development is arrested.

School life and work may cultivate a habit of haste, rush, nervous impetuosity. It may develop sluggishness, apathy, indifference, and distaste for all the exquisite pleasures of intellectual activity. It may foster a diathesis of care, anxiety, and worry, and I sometimes think that the method-cram is breeding a morbid neurosis of its own (for all form and no substance is straining to the mind; as one of our humorists says, "To kick at nothing is wrenching"). Or, finally, the school may bring new

interests and deepen old ones, and deliberately foster a habit of repose and reserve which is not incompatible with eager curiosity. Nothing is so worthy of love and reverence and devotion as the soul and the body of the growing, healthy child, and no institutions can be so noble as those which have for their object to bring these to most complete maturity.

DISCUSSION.

[Reported by Mr. J. H. Blodgett, of Washington, D. C.]

Supt. Barrington, of Newark, N. J.: What is your view of the mid-session recess?

Dr. Hall: It is of the most vital importance. Every moment over a half hour's attention by the younger children in the primary school is a source of error through a slackness of attention. The no recess plan is an abomination.

Supt. J. M. Greenwood, Kansas City, Mo.: Would you teach the girls especially as to ascent and descent of stairs?

Dr. Hall: There are elements of the greatest importance in the question, and details are given in the authorities named.

Supt. W. B. Powell, Washington, D. C.: What is the physiological effect or influence of attempting to read that which is not understood by the pupil?

Dr. Hall: All that a child is called upon to do that he abhors is hurtful, except so far as it trains the will.

Supt. Greenwood: What influence has the school had in causing myopia and other eye difficulties?

Dr. Hall: American conditions have developed a most wonderful type of the human eye. It is injured by using it under unfavorable conditions.

Supt. Treudley, of Youngstown, Ohio: In the matter of writing, what is the influence of "lattice" ruling?

Dr. Hall: It is of vastly more importance to have the lines exact in their relation to the axis of the eye than it is to have any ruling that does not produce this condition. Vertical letters and lines are considered better than slanting lines, and such writing is coming into great favor in many sections. Physiologically, it is the correct method.

SUPT. BOUTON, of Bridgeport, Conn.: What is the result of investigations made with reference to the use of blackboard and slate?

DR. HALL: Black lines on a white surface are about one-third better than white lines on a black surface.

SUPT. TARBELL, Providence, R. I.: What is the effect of copying from the blackboard to the slate or paper, thus frequently varying the focus?

DR. HALL: The effect is likely to be beneficial; it acts as a relief by change.

SUPT. TREUDLEY: How long should pupils of primary grades be held to close attention?

DR. HALL: The intensity of child life is greater in America than in other countries. Primary children should never be held to continuous attention more than half an hour without change and respite.

SUPT. GILBERT, of St. Paul, Minn.: What do you consider the best color for blackboards?

DR. HALL: Black and white are best for contrast.

SUPT. GREENWOOD: What especial influence is temperature supposed to have in matters educational? There seem to be radical differences in different countries. Is this due to different climatic conditions?

DR. HALL: This matter has received much attention in several countries, but reliable results are not attainable. Children can work better in summer than in winter, according to some hygienists. The reverse is claimed by others. We must have a surplus energy to use in the work; the child must therefore be comfortable. Various methods of heating and ventilating have been devised at different times and in different countries. One plan was to use a perforated floor, the air to pass through the perforations and out through the ceilings. I mention this as a novelty.

SUPT. A. P. MARBLE, Worcester, Mass., said he was much delighted with the exhaustive *resumé* of the opinions of experts in all these various directions. The paper was an invaluable treatise on the subject; but he desired to point out some of the difficulties in securing the best conditions. The ideal method of introducing warm air into a schoolroom, as set forth by an expert, was itself extremely faulty. To force the warm air through minute perforations in the floor and allow it to escape by means of its own rarity through the ceiling, is open to the very grave objection that in this way all the air to be breathed by the pupils comes up through the dust of the floor and all the inevital-

impurities brought into the room on muddy shoes. Children would breathe in a perpetual cloud of impalpable dust impregnated with bacteria, bacilli, and all sorts of fatal *microcosms* and infinitesimal creatures with magniloquent names—in other words, the dust of a school-room floor is not fit to breathe. Now, if such a difficulty exists in an ideal system, how far from perfect must the real systems be! In contemplating the difficulty in securing perfect sanitary conditions for children, Mr. Marble called attention to the fact that the healthy human animal has the power of adapting himself to varying conditions. Of all creation man alone (with the exception of the house fly, perhaps) can live in all climates. He can winter amidst Arctic ice, and summer in tropical heat. He can work by day in the deadly gases of the sewers and be healthy and strong. While attempting, then, to secure the best possible sanitary conditions for school children, which is a plain duty, at the same time is it not well for us to devote some attention to work from the other end of the line? With the automatic heat-regulator and damper, and along with the adjustable seat, should we not try to develop bodies robust enough to withstand the inevitable climatic changes—to develop the adjustable boy!

DR. WHITE, of Ohio: Are the educational conditions of to-day less favorable than they were twenty-five or fifty years ago?

DR. HALL: The demands are more exacting.

In concluding the discussion Dr. Hall said: "After all, I have much sympathy with the notion that the old district school was excellent in its day. But everybody thinks that we can do much better. The demands are far different; the problem of to-day is much more complex. But we shall be able to solve it with much success, and moreover we shall be able to meet in large measure the changing demands of our growing nation. In doing all this we shall be obliged to give much attention to the questions of health and morals. Good bodily health is the most favorable condition for good moral health. A study of the various phases of the health question, as presented in the paper this morning, will be found valuable, as the results of the most patient investigations are there given in reliable detail."

THE RELATIONS OF THE PUBLIC LIBRARY TO THE PUBLIC SCHOOLS.

BY W. H. BRETT, LIBRARIAN, PUBLIC LIBRARY, CLEVELAND, O.

In speaking of the relations of the public library to the schools, I use the term public library in its common acceptation, as including only those libraries intended for the use of the entire community, and free as the schools are free. I do not attempt a discussion of the use of books in connection with any theory of education. I assume, however, and the discussions to which we have listened during this meeting strengthen the assumption, that there is a strong desire and earnest effort to broaden and enrich without attenuating the course of study in the grammar schools, and it is with grammar schools that I am particularly concerned. I assume that the varying and to some extent contradictory plans which are urged for this purpose have *this* in common—that they are disposed to free themselves from the exclusive use of text-books—text-books which are too often mere quiz-compends—and to study literature, history, and the natural sciences by a broader and more attractive method. This implies the use of books and suggests the library. The desirable relationship between the school and the library is one of mutual helpfulness, and is eminently a practical one. I have nothing new to offer. If I can collate a few familiar facts in such a way as to illustrate the value and emphasize the necessity of the coöperation of the teacher and the librarian, I shall have accomplished my purpose. The public library is the creation of the last sixty years, and the substantial development of the common-school system is included in the same period. These sixty years of the life of our country have been years of vigorous growth, boundless expansion, marvelous activity, and undreamed of progress. They have witnessed changes in the conditions of business and manufacturing which amount to an economic revolution. The shoe-shop, the hat-shop and the tool-shop of each town and village have been replaced by great manufacturing establishments, employing their hundreds or thousands of operatives, and selling their products in every market. The little shop is being replaced by the great bazar, where one may purchase anything from a pin to a piano. An army of shop-keepers and small manufacturers have felt their business slip from their grasp, and have been thrust over into the crowded ranks of the wage-earners. It is not wonderful that a large and increasing population has not been able without friction to pass through such a revolution

and cannot without difficulty and distress accommodate itself to such changed conditions.

When we consider that this transformation has been accomplished within two generations, and that while it has been in progress the country has received and begun to assimilate an immense immigration, it is, indeed, wonderful that the hardships are not greater, and the discontent more general. One result of this has been a widespread dissatisfaction with the prevailing educational methods, and a demand for some change which will render education more helpful in the struggle for existence. The answer to this has been sought in different directions. An earnest movement has progressed with increasing volume during the last twenty years for the popularization of education. The Chautauqua Circle, the societies for home study, University Extension, and other similar activities, have for their purpose the sharing of that culture which will sweeten and enrich the life, and bring content, even though it put no money in the pocket. Seeking the answer in the opposite direction, it has been urged that the public school should aim to fit its pupils to earn a living, should give them information which has a money value, should to some extent replace the obsolescent apprentice system.

This demand ignores real education. The aim of the school is character, not livelihood. Given this, and that will follow. It would fit its pupils to live a life, not merely earn a living; it would set their feet in that way where, if they continue to walk therein, they will reach true manhood and womanhood. It does not aim to turn out mechanics and cooks, mere bread winners and loaf dividers, but men and women, feeling sure that the nearer they attain to that full stature, that rounded character, the stronger will they be to meet the difficulties of life, the more able to solve its problems. It has refused to introduce the commercial spirit, the atmosphere of the workshop and the market, into the schoolroom. Remembering the words of Plato, it does not teach arithmetic with the purpose of a shop-keeper, but for its mental discipline. It does not teach geography to make commercial travelers of its pupils, but that they may look out on this world which God has made and crowned with beauty. It would link together physical and political geography and history not as being independent subjects, but parts no one of which can be understood except in its relation to the whole. It would teach history in the spirit of that father, who, presenting his boy a set of books, wrote this: "To my son, this history of the world. May he never find it too large for him." I believe that there is a place for the library in this broader scheme.

The public library system has shared the quickening impulses of the times and has made its greatest growth within the last twenty years. If the passage of the various public school library laws, beginning with that of New York in 1827, may be regarded as its genesis, its exodus may be dated from the centennial year. In that year was published the

special report of the United States Commissioner of Education, which gave an account of the condition of the libraries of the country, with full statistics, a consideration of their various relations and apparatus. It gave to all the benefit of plans and ideas which a few progressive men had elaborated. To many it was a revelation and a release, breaking the cumbering fetters of antiquated methods, and leading them into broader fields of usefulness. In the same year, the American Library Association and the *Library Journal* were founded, which, in bringing librarians together and furnishing a medium for communication and discussion, have materially aided further progress. The School of Library Economy, established in 1887, is teaching the science and art of librarianship, broadly and thoroughly, and its graduates are doing a missionary work throughout the country. The more recent appointment of its founder to the position of State Superintendent of Libraries for New York is a step from which great results may be expected. The educational value of libraries has been substantially recognized in the willingness with which the people tax themselves for their support, and in magnificent gifts for their foundation and enlargement. Within the past ten years, more than as many millions of dollars have been given in a few large sums, and the smaller benefactions have been numerous.

According to the statistics of the Commissioner of Education, there were in 1876, in the public libraries of the country, in round numbers, twelve millions of volumes in twenty-five hundred libraries. In 1885, nine years later, there were twenty millions of volumes in five thousand libraries, an increase of fifty per cent. in libraries, and sixty-six per cent. in books. No later statistics have been published; but the intervening years have been full of growth, and it is fair to assume a large additional increase. These statistics include college and other libraries, but the public libraries form a large part of the totals given.

The important function of the library as an independent educational institution is to supply the means of self-culture. This includes the wide range from books suited to the smallest capacity and slightest attainment, to those which a liberally educated man may need in pursuing his studies in any field of thought or knowledge. Another is to furnish information on the practical arts. This ranges from a cook-book or a work-shop manual to text-books for advanced professional and technical studies. In this it resembles the American university with its college of the liberal arts, and group of professional and technical schools. The best equipped library does not give systematic instruction, nor prescribe a curriculum. It has no means of holding the sluggard to his work. It carries the elective plan to its last possible development. It is the work-shop of the earnest student.

The proper administration of a library includes not only the selection and collection of its books, their arrangement and custody, but also their

distribution, and so far as may be helpful the direction of their reading. To extend the facilities for distribution, branch libraries and delivery stations are established in many of the larger cities. These are helpful, but not entirely adequate, and multitudes in our large cities are practically out of reach of the libraries, and the little help in the choice of books which can be given to any individual is often entirely insufficient. It is in these important functions of the distribution of its books and the direction of their reading, that the coöperation of the school is needed by the library.

Since the organization of the American Library Association in 1876 no subject has been more frequently or earnestly discussed than that of reading for the young. Not merely to supply them with books, but to stimulate reading and guide it to higher levels, to educate a discriminating judgment and to inspire with a love for reading, have been the recognized duties of the librarian. To secure definite information I addressed notes of inquiry as to their work with the schools to the librarians of all public libraries in the country which appeared to have more than 5,000 volumes. The replies were prompt, full, and interesting. As I have them tabulated, twenty-two States extending from the Atlantic to the Pacific are represented. The general tenor of the replies indicates that librarians throughout the country are alive to the importance of the work. A few only of the whole number report that they are doing nothing further than to promote the individual use of the library by teachers and pupils. Many buy books with especial reference to the needs of the school, and give personal direction to the pupils. Some devote particular hours of each week to the school children. In one library the entire time of an assistant librarian is given to this work. It is a position requiring a rare combination of information, tact, and enthusiasm. This personal association is the most potent and valuable means of influencing the reading of the child; but while the teacher has perhaps fifty children whom she meets daily, the librarian has many times that number whom she can only meet occasionally and irregularly. Their relative opportunities for influencing the child may be measured and the need of the teacher's coöperation emphasized by this comparison. Much help has been given to this work by the publication of lists of good books for young people. Some of these are general, others graded to meet the requirements of the successive classes in school. The superintendent of education in West Bay City, Mich., has prepared lists giving the names of from seventeen to twenty-five books suitable for each grade from the fifth to the twelfth inclusive. They begin with the "Rollo" books and embrace a wide and progressive selection, until the list for the highest grade includes Draper's "Intellectual Development of Europe," Thoreau's "Walden" and Emerson's "Conduct of Life." The reading of from two to five of these books is required each year, and a test of the thoroughness

with which they have been read is made a part of the examinations upon which promotions are based.

The first recognition of the special needs of the teacher, and the first systematic attempt to make the library useful to him in his professional capacity, has been the issue of special cards allowing the drawing of additional books for use in the school. This plan has come into general use during the last few years. The number of additional books varies from two to six. In some libraries ten or more additional books are placed in a school for the use of the pupils. For these books the time of retention is usually, but not invariably, extended.

The library is also used as a reference and study room by teacher and pupil. Most libraries have, in addition to those reference books which are fundamental, various illustrated and other books which are of interest in connection with the school work. These are invariably placed at the service of the schools, and are largely used. In a few cases they are sent to the class-room when needed. In many libraries special rooms are provided to which the teacher may bring a class for an illustrated lesson.

The Worcester, Mass., public library has been a pioneer. A record of its work would serve as an epitome of the best that has been done in the public libraries of the country, for the public schools. The present librarian, from the beginning of his twenty years' administration, established and has maintained the most intimate and cordial relations with both teachers and pupils. His office has ever been open, his time and that of his assistants at their disposal, and the whole library theirs to use.

His next step, taken more than twelve years ago, was the issue of cards to teachers permitting them to draw six books for school use. This was followed a little later by a card on which twelve books could be drawn for the use of pupils—thus allowing each teacher eighteen books. In addition to this, small reference libraries were placed in some of the schools, and in 1886 collections of fifty books each were placed in four schools. This plan was successful and has been still further extended. Twenty-five or fifty copies of the same book have in some cases been furnished in order that an entire class might read it simultaneously. During all this time a large individual use of the library by pupils has been encouraged, and the pupils made to realize that in its relations to them the public library was a department of the public school.

Col. Higginson, speaking of the work of Mr. Green, says, "He has succeeded in linking the schools and library so closely that he and the teachers, acting in concurrence, indirectly control the reading of the whole generation that is growing up in that city."

I have thus fully described the work of the Worcester library as being especially noteworthy, both for the length of time during which it has been carried forward, for its thoroughness and efficiency, and as including

most of the plans for placing the library at the service of the schools, which are in use in any part of the country. In only a few places have any part of these plans been amplified or new features introduced.

The Detroit Public Library has had since 1888 a contract with the Board of Education by which it furnishes collections of books of from thirty to fifty volumes each to the high and grammar schools. The Board of Education becomes responsible for the books, and transports them to and from the schools. They are sent out eight times annually. Collections of books were provided especially for this purpose.

The Chicago Public Library is issuing books on a similar plan, and sends out 3,000 to 4,000 volumes per year.

The St. Louis Public Library is working earnestly in the same direction, though seriously hampered by the fact that the library is not a free one. Membership cards have been issued to pupils at half price. In one colored school twenty boys, under the influence of an enthusiastic teacher, bought library cards with money earned by shoveling coal and doing errands.

The Fletcher Free Library, of Burlington, Vt., has been issuing books to the schools since 1882, practically without any limit as to number of volumes or time retention.

The Milwaukee Public Library is systematically issuing collections of books to schools of the fourth to eighth grades, inclusive. These books are issued to the teacher for two months at a time, and she may re-issue them to those pupils who have cards entitling them to draw books from the library. From December, 1890, to July, 1891, there were 4,096 books issued to the schools, which were again issued by the teachers to the pupils, 15,120 times.

"There are now" (I quote from a letter of February 8) "about fifty teachers issuing books to their classes, with an average of forty books to a class. These classes are distributed among nineteen schools.

"Besides proving of inestimable value in the school work, we find the parents reading the books as well; a large proportion of the increased direct circulation being attributable to this method of circulation, through the school into the home. The books most called for are those of science and travel, with a sprinkling of wholesome fiction. Many of the schools have libraries of their own, and draw books from our library to supplant their own collections. For example, a teacher just taking up United States history sends to the library for twenty or thirty books dealing with the early period. The same plan applies to the study of other subjects."

This account is quoted from a letter written by the superintendent of this work in the Milwaukee library, who had formerly, as a teacher, been unusually successful in interesting her pupils in reading by the use of books drawn from the library. Dr. Linderfelt, the librarian, gave a circumstantial account of this work, speaking in the highest terms of its

value, and concluding with the remark that they would sooner think of giving up any other department of the library.

The Cleveland Public Library has for the past seven years issued special cards to all school-teachers, permitting them to draw books, and in some cases to keep them for a longer time. It has also endeavored to give to the pupils of the schools every facility for reference, work, and study. A convenient room has been used by classes, both of the public and private schools, for studies in history, geography, and art.

The library is also issuing books to the teachers for the use of their pupils, on a plan similar to the Milwaukee library. They are, however, issued for the entire year, with the privilege of exchanging any part, or the whole of them, at any time. Our last year's experience, however, was that a well-selected collection of fifty volumes will interest a school of about the same size during the entire year, and comparatively few exchanges were made.

The assistant librarian, who has the school work in charge, aims to visit each school once each month, advising the teacher beforehand of the day and hour of her visit. She checks the books to see that they are all accounted for, examines their condition, and arranges for any exchanges that may be desired. This is as effective in protecting the library from the loss or improper usage of its books as a frequent return of the books to the library, is less expensive, and has a great additional advantage in that it does not interrupt, even for a day or two, the use of the books. The teacher is at liberty to issue these books to her pupils for home use at her own discretion, and without requiring them to be vouched for at the library and receive a card. The teacher is held responsible for their return to the library, and for reasonable care. The teachers have almost invariably issued the books freely for home use, and very few of the pupils drawing them were holders of library cards. This is the third year during which this plan has been in operation. During the last two, of which we have had over three thousand volumes in active use in the schools, we have thus far lost three volumes, and the books have received more careful usage than the average of those issued from the library in the regular way. This work in Cleveland was suggested by a conversation several years ago with one of the supervising principals. She spoke of the marked superiority in general information shown by the pupils of a school situated near the library over those of another farther away—a superiority which could not be attributed to any home advantage, but which she believed was due to the fact that they were within easy reach of the library, and used it largely. As a fruit of this suggestion, the issue of a few books was begun to some more distant schools. The only object thought of at first was to place books within reach of pupils who were too remote from the library to conveniently reach it; but in operation it has developed such additional advantages as to justify the opinion that it

would be a desirable method of placing books in the hands of the pupils, even if the schoolhouse stood next door to the library. At the present time we have books in use in one hundred and one schools, from the third to the eighth grades inclusive, distributed in thirty-one buildings. The collections vary in size from fifteen to fifty volumes, and average a little more than thirty; all the books available for this purpose, a little more than three thousand, being in use. Many more could be used at once, as every teacher who has less than fifty books would be glad to have her collection made up to that number, and we have received additional applications which we are unable to fill. With a selected library of twelve or fifteen thousand volumes it would be possible to carry this plan not only through all the public schools from the third to the eighth grades, but through the parochial schools. The influence upon the community of such a work, carried forward intelligently and thoroughly for a series of years, is incalculable.

The quality as well as the quantity of the books issued gauges the value of this work. Of the books in use at present 41 per cent., or something over twelve hundred volumes, are classed as juvenile stories. Among them are a large number of Miss Alcott's, Susan Coolidge's stories; these, with Mrs. Burnett's "Lord Fauntleroy" and Mrs. Dodge's "Hans Brinker," are much sought after. There is 4 per cent. of fiction, including Cooper, Mrs. Stowe, and Mrs. Whitney; 10 per cent. biography, 11 per cent. travels, 13 per cent. history, mostly of our own country, 9 per cent. literature make up the list.

The opinions of librarians throughout the country, and the opinion of teachers as reflected by them, is almost unanimous as to the value of the books in the schools. I have little direct opinion of teachers, except of those in the Cleveland schools. I recently sent a circular of inquiry to those Cleveland teachers who had been using books long enough to enable them to form an opinion.

I asked, among other things, whether any special means had been adopted to interest the children in the books and induce them to read. To this the reply of many was that no special means were necessary. One teacher says, almost pathetically: "They need no incentives. They prefer their books always to their school books. Their minds and hearts are set upon them." She is still using her books, however, and I imagine is able to keep the too intense interest of her pupils within reasonable bounds. Some read extracts from books, tell stories from them, refer to volumes of travels from the geography lesson, or to an author from an extract in the reader. One strikes the keynote when she says: "I am interested myself." I also asked whether any attempt was made to ascertain how carefully and understandingly the books were read. To this I received a great variety of answers. Some talk with the pupils about the books, or encourage them to give oral or written accounts of

what they have read. Some reply that the pupils frequently make remarks upon subjects under discussion in the classes which show that they are reading intelligently. One teacher of the seventh grade has required from each pupil a written abstract of each book read. By some the books are grasped as a whole, and their salient points noted in a way that seems remarkable for children of that age.

In reply to a question as to the favorite books, while there was a decided preponderance in favor of story books, still there was a surprisingly large number who preferred history, travel, biography, and natural history. American history with its stirring stories and travel, spiced with adventure, is a prime favorite with the boy, and a strong rival of the story book for his affections. There seems to be nothing which exactly takes this place for girls.

To the inquiry as to whether books interfered in any way with the school work, the answer was an almost unanimous "No," and in most cases an emphatic statement of their great helpfulness. Two teachers only out of the fifty thought the reading interfered with the work, and a very few mentioned cases of individual pupils in which it had been a hindrance, though in the main helpful. A number of teachers spoke of some boy, particularly difficult to manage, who had been transformed by becoming interested in books. Some teachers have made the use of particular books as a reward for specially good work; others have taught lessons in neatness by refusing to let them be taken in dirty hands. Several speak of their influence in replacing trashy reading. Among the benefits most frequently mentioned were improvement in the use of language and broader information in history and geography.

Thus far the questions concerned the direct effects of the books in the school. I was also informed that the books issued for home use were largely read by other members of the families, that they were in many cases going into homes where there was very little other reading matter, and that the parents and older brothers and sisters were greatly interested in them. Several instances came to the notice of teachers in which books had been bought as a result of the interest awakened by the library books. This may not seem of any special importance to the school, but it certainly does affect the pupil, as does anything which improves his home conditions.

It has been said that if you wish to really educate a boy you must begin with his grandmother. In this way we can at least work back to the parents.

In the language work of the Cleveland grammar schools for the present month there are not less than seven distinct subjects drawn from history, biography, travel, zoölogy, and manufactures, no one of which could be satisfactorily studied in any text-book used in those grades. This implies the accessibility, and compels the use, of a collection of books.

One of the subjects noted is amphibious animals. What a fund of entertainment and information any fairly stocked library contains on a single one of those animals, the beaver! What a different thing will the page of the geography which gives an account of Chili be to a boy who has read the interesting descriptions of those "Yankees of South America," and their country, given by Knox, or Childs, or Curtis! Coffin's "Old Times in the Colonies," or Irving's "Washington," will illuminate the pages of his United States history for a boy. He will read between the lines a hundred interesting things which the boy beside him knows nothing about. These are only suggestions of the many ways in which the use of books will enlarge and enrich the school course, will transfigure the dull pages of the text-books with the glow of romance, and transform their dry leaves with warm pulses of life. But beyond and even more important than the assistance which reading may give to the other work of the school is the formation of the reading habit. If a boy can leave school acquainted with even a few good books, with a taste so discriminating that he will hold his reading up to even a materially high standard, and above all a love for books, he has a precious possession, something that will be worth more to him than any study in the curriculum, something that will not only help him in his daily work, but will throw a safeguard about his leisure hours.

I have thus indicated some of the advantages to the school work of the free use of books. It is too soon to express a decided opinion as to the best method of supplying books to the schools. The plan of placing collections of books in the charge of each teacher for her own pupils has decided advantages. Such collections can be used effectively in all schools, from those primary grades which have acquired the mechanical art of reading, to the highest grammar schools; that is, from the third to the eighth years, inclusive.

The advantages of issuing them from a central library, whether it be the public library or a special one for the purpose, are great. It assists the teacher in the care of the books, and is a check on any negligence. It affords the advantage of greater variety, and an opportunity to exchange books when desired, and brings expert skill to the work of selecting and cataloguing. Collections of books would of course be progressively graded, and in some of the higher grades instruction might be given in the use of reference books. The pupil entering the high school needs and should be prepared to use a large library. A small collection of books will not meet his requirements. He must look either to the library of the school or the public library. The use of the library by the pupils of the high school is an important and desirable thing, but not difficult to secure. They gladly avail themselves of it, and only require the same measure of courtesy and attention which is due to all its users. The work in the lower grades is of vastly more importance. They contain that great majority who never

reach the high school, and include those whose opportunities are least and whose needs are greatest. In the grammar schools of Cleveland there are now about ten thousand pupils, and in the high schools less than two thousand. The figures read from this platform yesterday show a still greater disproportion in the country at large. This means, carried forward a little, that not one in five of the pupils in the grammar grades to-day will ever enter the high school. Whatever is done for these boys and girls must be done for them now. Let the resources of our libraries be used to the utmost for their benefit. They cannot be used more worthily. Let the teacher and the librarian unite their best efforts to help these boys and girls to read and to enjoy reading. Then, though their school days must end so soon, their education will go on. Then will they never lack that stimulus and strength, that solace and comfort, which are the portion of those who truly love and rightly use good books.

DISCUSSION.

DR. A. E. WINSHIP, of Boston: The school of our fathers cannot be the school of our children. The facts of yesterday are scarcely worth knowing to-day; even the discipline of to-day will not meet the emergency of to-morrow.

It matters less what one has read than what one is reading, and even what he is reading is of less consequence than what he will read. A base line is the most useless thing in the world except for purposes of projection.

School reading is practically a waste of time so far as its own value is concerned. It can never be of great service, and the chances are that all one learns from it will be worse than useless. Arithmetic, despite its eminent abuse, is about the only thing that the child learns, that he knows that he will not have to unlearn. Dates, whose abuse is the delight of "reformers," are the only things in history that one can place much confidence in. They have an arithmetical flavor. The only things that Irving really knew about Columbus were the *dates* of sailing and of discovery. Think of the multitudes that read Irving's "Columbus" and died before the days of Winsor. It would have saved us all a deal of trouble and some humiliation if we had either died before Winsor or had not been born until now.

In my teaching days there was no language sufficiently expressive of the superior value of the facts of science. Thirty-six of the latest and best works in chemistry adorned my library, regardless of expense. The same was true "for substance of doctrine" of botany, zoölogy, natural philosophy, and astronomy. Those were not absolutely ancient days, and yet,

so far as I can judge, about the only thing I taught that both pupil and teacher have not had to unlearn is the mathematics of these sciences.

Only as the pupils learned the importance of *reading* upon the subjects taught; only as they learned that it was as important to read the tick of the telegraph wire as the crack of a geological hammer, did I do them service. While one student cracks one rock to advantage, a thousand others have cracked a thousand rocks which the telegraph echoes the world around.

No man living has money enough, brains enough, or time enough to own or use for himself the books he needs if he proposes to accomplish anything worth his while in any direction. Mr. Depew's after-dinner oratory is not famed for its grace, wit, brilliancy, or fervency as much as for the fact that he knows when to send to the libraries for the latest fact and fancy upon any thing upon which he is invited to speak.

No man who is at his best ever takes the time to look up all the facts he wishes to know. As an editor I receive more than a thousand questions a year from subscribers who wish to know facts that it is easier to ask for than to search for, and $\frac{99}{100}$ of these are answered; but the editor rarely spends his time looking them up.

There are 10,000 children in the schools of to-day who will earn a good living in positions in which the skillful use of libraries will be a special commendation.

A school is almost a curse to the graduate if it has given him the impression that he has "learned it all;" it is little less mischievous if it has given him the idea that it has pointed out the books in which he can learn all that he needs. All the books ever written upon New England history prior to 1891 may be learned word for word, and yet we cannot "speak by the book" upon New England character unless we have read Alice Morse Earle's "The Sabbath in Puritan New England." No library is of service to mankind to-day over which, or in which, there is not an expert who knows what book, and almost the page of the book, lends the latest artistic touch to every fact in history, science, literature, art, and invention.

It was worth while yesterday to get enthusiastic over the telephone that used its "poky old wire," but to-day it is a waste of time; we need our wits and time for the understanding of Edison's latest, by means of which his instrument speaks into the heavens, and may be caught from the air by any one who has the companion instrument within a range of fifty miles. It was all right to admire the phonograph yesterday, and the phonographic-telephone this morning; but now, nothing less than Edison's photographic-phonographic-telephonic-telegraph is worthy our attention.

The school has as one of its highest missions the teaching of its graduate how to know how to learn the how of every latest important thing in his own field, so as to make the most of himself, through the best

of everything, for the greatest good of the greatest number for the longest time.

This is only possible when a large part of the time and effort of the school is given to teaching the art of acquiring a taste for the best, and only the best, in the classic classics, in scientific science, in artistic art, and in ingenious invention. Teach a child where to go for a book, what book to get when he gets there, when and where to open it, and when to close it.

The "final" is as vital as the initial in the use of books. The teacher must know and teach the alpha and omega of the library problem. If the teacher is not equal to this thing, *no one is*. The teacher of yesterday did the work of that day well; the teacher of to-day is doing the work of the day well; the teacher of to-morrow will be ready for the day and its demands. New necessities, new books, new libraries, new librarians, will all be utilized by the teachers of to-morrow. Sufficient unto the day is the privilege thereof.

SUPT. A. K. WHITCOMBE, Lowell, Mass.: I desire to express my high appreciation of the paper to which we have just listened. The information contained in it is simply invaluable. We do not need to be convinced of the importance of making the public library an adjunct of the public school; we know that already: what we do need is to be told just how to do it, and this Mr. Brett has done. Had I been privileged to hear such a paper a dozen years ago, it would have saved me much valuable time, and kept me from making some costly mistakes. In the lack of such guidance, however, I gradually worked out a plan very similar to that commended by Mr. Brett, and for several years the school under my charge—for I have been a teacher much longer than I have a superintendent—has read from four to six thousand volumes yearly, counting the whole number of times each book has been read. The librarian of Lowell has not been exceeded in liberality by any. He allows teachers to take out just as many books as they please, and to keep them just as long as they please, upon the sole condition that if a book loaned to a school is called for by any patron of the library it must be returned. Enough duplicates, however, are provided to make such recalls rare, and practically teachers have all the books they want for as long a time as they choose to keep them.

And now, just one proof of the value of this reading. Last year I went through the several rooms of my school, and asked all the scholars to write upon a slip of paper the names of the best three books which they had ever read. These lists I examined with very great interest, and I cannot tell you with what satisfaction I found that the whole catalogue did not contain the name of one book which I could not commend. A majority, indeed, were from the books with which pupils had been supplied by their teachers, and others were on the same lines, proving that

our guidance was still felt even when pupils made their own selection. A similar test in a school where no books had been supplied by the teacher showed a state of affairs so different that a comparison of the two lists would be enough to convince any one of the feasibility of directing the larger part of the reading of most pupils, and of the imperative duty which rests upon the teacher to do this.

And now let me refer briefly to one or two objections which I have heard. One teacher to whom I was speaking said, dryly, that "when a measure was full of grain there was little room left for chaff," by which he meant, I suppose, that if his pupils learned all he wished them to do from text-books they would have no time for other reading. In answer to this I can only say that if any one knows of any more valuable "grain" than is found in the best books he has information which I do not possess. Another eminent educator has said that he sho uld consider it an impertinence for any one to suggest to his own child what he should read, and that he himself should not be guilty of the same impertinence to the child of any other man. I leave the good sense of this audience to answer this objection, only remarking that the gentleman referred to seems to take a far lower estimate of the dignity and privilege of a teacher's position than I do. A third gentleman, a well-known superintendent, to whom I was speaking with satisfaction of the reading being done by my pupils, said that it did not seem to him a matter for congratulation at all. Most children, he said, read too much already, and he would feel more inclined to commend a plan which should make children read less rather than more. I admit that some children read too much; but, since they will read, is it not a matter of the first importance that their reading be pure and ennobling? In my opinion, this is the most important subject considered by this department at this meeting. It is entirely practicable for teachers to guide the bulk of reading done by all their pupils, and if they do this wisely it is of more importance, in my opinion, than all the arithmetic, grammar, and geography which they can ever teach.

HON. D. L. KIEHLE, State Superintendent of Minnesota: The discussion of this valuable paper has thus far followed the line suggested by it; namely, how to supply the several grades of city schools with the reading matter required in their work. There remains another and equally important part of this question unanswered—how can the common schools of the country be supplied with such literature as is needed for the intellectual nourishment of their youth. The valuable result of common school instruction, as of any other, is the zest for learning, the taste for reading, that is acquired. Our country boys, who have with short terms of school learned some arithmetic and geography, and at the same time, by giving the hours of long winter evenings to good books, have cultivated vigorous appetites for reading, give greater promise of success as students

than others who have been long in school and under the control of the school have learned much from text-books.

For the encouragement of common school libraries, and to assist school districts in making judicious selections, the State of Minnesota has appointed a public school library commission, consisting of the Superintendent of Public Instruction and the presidents of the four State normal schools, who have made an approved list of books adapted to the several grades of youth attending school. Any district making a first order of not less than $40 receives $20 from the State; making a second order of not less than $20, it receives $10; and in making any subsequent order of not less than $10, it receives $5 from the State.

During the four years of the operation of this law the value of school libraries has increased from $41,095 to $106,418.

The number of orders made during these years has been 1,676, amounting to $56,897.32, of which the State has paid $25,609.08.

At this time about twenty-five per cent. of the common school districts and all the State high schools are supplied with good working libraries.

DR. W. A. MOWRY, Salem, Mass.: The discussion of the paper on "The Relation of the Public Library to Schools and Workingmen" was continued by William A. Mowry, A.M., Ph.D., Superintendent of Schools, Salem, Mass. He said:

One of the most interesting features of our progress in intelligence and in thrift is the growing attention now given to the public library. This movement may be said to have begun in connection with the district schools of New England and New York about fifty years ago. As the special division of townships into school districts is unwise and unphilosophical, so the establishment of separate libraries for each schoolhouse could hardly be expected to prove entirely successful. But in some sections of the country, the town and city public libraries are now attaining great success and assuming their proper importance. The gigantic strides made by our American people within the last fifty years in the establishment of public libraries and their improvement is nothing less than marvelous.

There are to-day in the United States about 6,000 public libraries, with an aggregate of more than 20,000,000 volumes.

The old Bay State, ever foremost in matters of learning and general intelligence, now points to over 600 such libraries, which contain more than 4,000,000 volumes. One hundred and seventy-five towns and cities have free public libraries under municipal control, and out of our total of 351 towns and cities, 273, or all but 78, have libraries in which the people have free privileges. These 273 libraries contain 2,500,000 volumes, which are available for the use of about 2,140,000 out of the total 2,240,000 inhabitants of the State. These libraries have cost about $6,000,000.

From these figures it may be inferred that our people in different parts of the country are awaking to the importance of looking after the reading of the masses. At a time when greater efforts are making than have ever before been made for the education of all the children of the country, it is an encouraging sign that civil society is arousing itself to guide, direct, control, and increase the general reading of the people. Indeed, it is surprising, when we think of it, that this important department of education has not at an earlier date received its proper attention. We are, indeed, fast becoming a nation of readers. Doubtless many persons read too much. The guidance that they require is quite as important as that of those who read too little. There is a class in every community who may be called omnivorous readers. They are what Horace calls *Heluones librorum,* gormandizers of books. They seize upon books with avidity, skim over the pages, are pleased with the images spread before their minds, which they only glance at, and seem to take great satisfaction in the consciousness that they have read such a large number of books. A man of this sort may read forever without increasing his mental ability, or making any real addition to his stock of useful knowledge. Indeed, such persons seem not to make the slightest distinction between learning and that practical wisdom which makes learning available.

It was Isaac Taylor who said: "Thinking, not growing, makes manhood. Accustom yourself, therefore, to thinking. Set yourself to understand whatever you see or read. To join thinking with reading is one of the first maxims, and one of the easiest operations."

This class of readers needs that gentle but persistent aid in the way of suggestions and hints which a good librarian learns by experience how to give, and which are so essential to the proper usefulness of books. But it should not be forgotten that nature everywhere furnishes an antidote for evil. Those who have had the most to do with reading and readers need not be told that the average mind will oftentimes, without much aid, bring itself out of this difficulty. This law is apparent with regard to the quality of reading.

We have in our country a class of libraries usually termed circulating libraries. These aim to furnish the most popular reading to all comers, charging a fee of a few cents a week for the use of the books. The class of books usually found in these places is often of a lower order of ability and worth—mostly fiction, largely stories of crimes and criminals, remarkable adventures, hairbreadth escapes, or silly love stories. This sort of reading often proves harmful. At best, it is only feeding on husks. But I believe that most librarians have observed that this kind of reading, whether it be of the sawdust kind, or hollyhocks and sunflowers, or lobelia and ipecac, in many cases cures itself. The reader is either nauseated, and so, turning from such books in disgust, seeks better food, or, finding no nutrition in sawdust, he becomes really hungry for that

which will nourish and strengthen. I have known many a boy to dive into this lower grade of novel reading, swim along through the slimy, muddy, loathsome pool, become disgusted with the taste and sight of such stuff, pull to shore, leave the stench behind him, and washing himself clean in the pure running stream of good books come forth purified, healthy, vigorous.

While it is doubtless true that minds really vicious in their tendencies and desires are often permanently injured by this sort of reading, I believe it to be equally true that the average youth is quite likely after a time to leave the lower grade and betake himself to books of a higher order and better quality. Yet even in such cases how much better it would be if all the young persons, by kindly hints and pleasant suggestions, could be brought in contact with books equally interesting and far more profitable, thus saving them from the wasteful and uncomfortable experience of feeding for so long a time on husks and choke-cherries.

There will always be found a reciprocal influence between the library and the town. On the one hand, the usefulness of the library depends very largely upon the character of the people. They must be educated up to its use and to an appreciation of its value. It is clear that the library, even of the best character and under the best management, would be of very little worth among savages. Its value will everywhere, and in all cases, be enhanced by the general intelligence, the educational advantages, culture, and elevation of the people. On the other hand, the library is designated to cultivate and elevate all classes of people.

To produce the best results the library should aim to furnish to all the people, old and young, of average intelligence and of the highest intellectual advancement, both improvement and intellectual entertainment. It should strive by all possible means to gain access to every class. It should reach out its arms to the old and place acceptable reading in their hands. It should open its treasure to business men, such as would benefit them and attract their attention. It should have a word of encouragement for the disheartened and desponding. It should furnish amusement and instruction to the indolent, that large class in some communities frequently termed "constitutionally inactive." It should provide proper food for the ambitious and those who are desirous to better their condition and to improve their prospects. It should furnish a variety not only of the best reading, but of such reading as will prove to be the most available; that is, the best that these several classes will receive and appreciate. It should take great care, therefore, not to shoot above the heads of the people. Above all and before all, it should take the greatest pains to provide all sorts of reading, appropriate, entertaining, and beneficial for the young. For with this class, this large and important class in the community, will be its most efficient work. The librarian should, therefore, put himself into easy communication and the most

intimate relations with the teachers of the schools, public and private. He should be free to make suggestions to these teachers and to call their attention directly to various books adapted to the children in their classes. He may furnish to the pupils, from time to time, lists of books upon topics of public interest.

It will readily be seen that by such a course as here is indicated the librarian plays an important part in molding the thought, increasing the intellectual activity, and furthering the prosperity of the town. A town or city which puts to proper use a good public library of books, well selected and under proper management, can scarcely fail of being thrifty and intelligent.

Constant contact between mind and mind sharpens the wits, provokes thought, and in every way produces a strong tendency toward intellectual development, growth, and breadth. For the same reason, on a larger scale, the rapidly increasing commercial relations between the various civilized nations of the earth has become one of the most important educational and uplifting forces in the development of mankind.

No one of the nations of the earth has a more difficult problem, a more gigantic task, before it than our republic. We have, on the whole, greater opportunities, larger blessings, than any other people. Money brings here a better interest; commercial and business enterprises yield a surer and larger return; there is a wider range of industries, a greater activity of inventive genius; laboring men of all classes, in all the walks of life, from the highest to the lowest, receive larger wages for their labor than in any other country. Our people, as a whole, live better, dress better, enjoy more of life than the people of other countries; but all these things place us under greater obligations, and make it more difficult to keep everything up to the level of the plateau on which we live.

We, therefore, need the broadest statesmanship, the truest philanthropy, the greatest intelligence, and in all respects, in every department, the best educational advantages. To this end it is necessary that our excellent American public school system should be lifted to its highest usefulness; that the public library should be established and liberally maintained in every town; that each community should by thrift, industry, frugality, and a liberal public spirit do its part toward educating and elevating the people; that each municipality, whether town or city, by all proper and necessary appliances, in the several departments of the family, the school, the church, and society, should, by a forward movement all along the line, do its part to promote the general welfare, in order to prevent such a retrograde movement as in this age of rapid development and sharp competition would soon leave us behind the other nations.

HON. NATHAN B. COY, of Colorado: While fully appreciating the compliment of the special appointment for the discussion of this question, I

have been indulging a serene hope and belief that I would be permitted to sit and listen to those more experienced and better qualified to speak.

It has been remarked here that since the war of the Rebellion we have become a nation of readers. I am wondering if we had not already won that distinction before the war. That keen observer of American life and tendency, Mr. Wendell Phillips, was not always unerring in his prophetic outlook, nor was he always in error. Two instances will illustrate. During the year in which the great Rebellion closed, the government of the city of Boston was stirring the mind and conscience of its people, when Mr. Phillips advised placing the city under the control of a metropolitan board of commissioners. *Eighteen years later* the legislature of the State followed the advice, and the plan prevails extensively now throughout the country. In the same year Mr. Phillips deplored, as a result of the war, the loss of a reading republic, and the substitution of a military dynasty that would be given over to predatory excursions and wars of conquest. He reasoned from the common experience of civil wars in the past, and voiced a common fear. When, however, the armies of that terrible conflict disbanded in orderly retirement, and quietly resumed their wonted peaceful occupations, the civilized world was transfixed with surprise and admiration. It was an unexpected object lesson in self-government. Those armies were composed largely of reading soldiers, and the influence of their reading survived the usual consequences of "the dread arbitrament of war."

The question is not, "Do the children and the people read?" but, "What and how do they read?" The feeling is common, I think, that, compared with the quantity, there is very little good reading done in these days; that the average falls far short of what it was prior to the war, and what it should be; that the perishable literature of temporary interest furnished by the periodical press is supplanting the permanent literature of tested books. Admirable, helpful, indispensable as are the dailies, weeklies, and monthlies, they cannot impart that strength, inspiration, and ethical power which the best books of the best authors give. Hence they should not be read exclusively. I am disposed to think that many an old farmer of earlier days extracted more from his single volume of Milton or Shakespeare than the average reader of to-day gets from his miscellaneous matter. The schoolmaster and the librarian are to-day unitedly trying to correct this evil tendency. It is natural that they should work together. The legitimate union of these two factors in education was recognized when John Harvard coupled with his gift of money the bequest of his private library, a small collection compared with those of to-day, but of far-reaching and fertilizing influence. It is still recognized in the prominence of colleges and libraries as the two favorite objects of philanthropic gifts and bequests.

DR. EDWARD BROOKS, of Philadelphia: I have listened with great interest to this paper on the use of the public library, and shall await its publication with still greater interest, on account of its valuable and practical suggestions. The subject is of special interest to me at this time, as councils in Philadelphia have just made an appropriation for the establishment of several public libraries to be used for the benefit of the children in our public schools. The movement is experimental with us, but it is an experiment that if properly carried out must prove successful. Indeed, I believe that it will be found before long that the public library is one of the most important factors in this problem of public education. We teach our pupils to read, and thus put into their hands the key of knowledge—a key that may unlock a treasure-house of good or evil. The destiny of a child is not determined by the ability to read, but by what use it makes of this ability.

"Knowledge," it is said, "is power," but it is the use of knowledge which gives it power. A truer maxim is, that culture and knowledge combined give power. Culture or discipline is the effect of knowledge in proper relation to the human mind. The sources of knowledge are at least threefold—perception, reading, and thinking. The child gets its first knowledge through its perceptive powers, a knowledge of objects and their qualities. But we need more than perceptive knowledge for an education. The untutored savage has as good perceptive powers as we have, and as clear an idea of objects and their qualities, but he is an untutored savage still. It is the rich inheritance of knowledge, and the culture that comes from it, that lift us above the savage tribes. The best knowledge of the race, and the richest culture, we find recorded in books. The great thinkers of every age, those deep and rich souls who have caught the inner meanings of things, to whom the universe has whispered her profoundest secrets—they have embalmed their thoughts and sentiments in language; and it is our privilege to go to the printed page and take into our souls the richness and beauty and truth that came from these gifted sons of genius. One of the pleasantest recollections of my childhood is the district-school library—of only a few volumes, but these volumes were to me a source of inspiration and success. They have left indelible impressions on my memory and taste, and have contributed largely to shape my thought and action in life.

The spiritual nature needs more than the forms and objects of the material world for its growth and development. It needs the thoughts of the great thinkers to awaken it to original thought and investigation. This is true in the domain of science; each individual has not the time to discover what has already been discovered; he must avail himself of the results of previous investigations as recorded in books. But this principle is even more important in the domain of literature and philosophy. High thoughts lead to high thinking and noble action. One of

the best parts of an education is for a young mind to come in contact with and feel the touch of a soul full of high thoughts and noble aspirations and lofty sentiments. Spiritual power and spiritual ripeness come from the communion with such lofty spirits as Plato, Dante, Milton, Shakespeare, Emerson, etc.

In the education of our children, therefore, we need the accessory of the school library. We want to train our pupils to read good books, which shall give both knowledge and culture. "Good books," I say, for children, if properly guided, will learn to love good books better than poor ones. I think we often underrate the abilities of children or young persons to understand and appreciate the higher class of literature. A young lady at my house last week told me with what pleasure she read *The Merchant of Venice* and *The Tempest* when she was only twelve or thirteen years of age. These higher forms of literature become models of taste that protect many people from that which is inferior and trashy. Cultivate in early life a fondness for good reading, and we open avenues of culture and pleasure that will be of inestimable value. And so I look forward to the establishment of libraries to be used in connection with the work of our public schools as one of the most important factors in the solution of the great problem of education.

REBECCA D. RICKOFF, of New York: When we think of the great numbers of children in our vast country that are in attendance in our public schools, and then consider that these children represent an even greater number of parents, the question of what these parents are doing in regard to the kind of reading their children have becomes of grave importance; and more especially so, in view of the fact that the children are tempted on all hands by that which is pernicious.

I have for years been observing in the shops how parents buy books for their children: this is especially interesting during the Christmas holidays. How many times, unfortunately, have I seen fathers and mothers hurriedly glancing over the juvenile literature that crowd the counters, utterly helpless before the confusing piles of books, and painfully ignorant of their duty. With no previous preparation for making a selection, with no knowledge or thought of the author, hardly even understanding what is the subject of the book, and much less of its motive or probable influence, they spend less time and consideration on the purchase of a book than on that of a toy. How many thousands of books are bought in this haphazard way!

We who attend these conventions and are kept *en rapport* with the best educational thought of the time can scarcely realize, without an effort, the difficulties of parents who are not thinking in this line. Naturally, all wish their children to read what is best for them, as they wish them to eat what is best; but the trouble is too many of them do not

understand what is most wholesome for children, either in the one particular or the other.

Then, too, we must consider the multitudes of foreigners amongst us, whose children are to be our citizens. Even if they know something of their own literature, they are entirely ignorant of ours; and to whom can they look, and to whom do they look, for assistance but to the teachers and the librarians?

Even a little attention to this matter, just enough to give a trend of thought to the fact that there are things that children ought not to read, will be prolific of good results. It can be easily managed to give no offense to the self-pride of parents, who might justly resent what would appear as officious meddling with their prerogatives.

In this connection I cannot commend too highly the plan spoken of by Prof. Leipziger, that of free lectures for the people. Here can be found the needed opportunity and the occasion to set a community to thinking about what to read, not for themselves only, but for their children also. I repeat, it is needed only to set the parents thinking of this matter to make them watchful and eager for the assistance of teachers and librarians.

SUPT. W. B. POWELL, of Washington: I am interested in the subject under discussion because it affects the methods of instruction in almost every branch of education.

The chief purpose of the union of the library with the schools of the community is not that children may have books to read after they have finished their school tasks, but that they may have books to consult while preparing their school tasks, books by which they best prepare their school tasks.

It is not the business of the librarian to determine the books the school should read. This is the business of the teacher. He should know the author that should be consulted, the volume that should be consulted, the chapter where the desired information may be found. Thus may the child be introduced to books by the means in which they may be made most profitable to him. Thus may he come to know what a library is, what its relation is to the world of formulated knowledge, what its relation is to his school work, what its relation is to the purpose of his school life. Thus may the child learn to know where information is to be found and how he can find it; thus may he be trained to use information found in books to his educational advantage.

If the child is studying colonial history, let him be sent to McMaster to learn of the habits and customs of colonial days.

He will thus learn to know the value of McMaster; he will learn to like McMaster, he will be induced to read McMaster beyond the limits of the requirements of his recitation assignments. Such reading is a safe occupation for him.

Ask him to read Hawthorne's *Pine Tree Shilling* and tell him where to find it; thus will he be introduced to Hawthorne, in whose company when reading he is safe.

Almost every topic of history may be treated in a corresponding way.

How easy it is thus to teach history, and how surely when history is thus taught does the child learn of authors, and learn to like them for what their writings can do for him!

The study of geography is made interesting by corresponding methods by which pupils learn to read understandingly and with profit.

The investigation of nature resulting in the discovery of facts, or the physical experiment resulting in the discovery of phenomena, should be followed by reading authors that treat on the subjects investigated. Thus is the knowledge discovered confirmed, and thus are pupils best led to read works on science.

JOHN AMOS COMENIUS.

EXERCISES IN COMMEMORATION OF THE THREE HUNDREDTH ANNIVERSARY OF HIS BIRTH, 1592–1892.

I.

His Private Life and Personal Characteristics.

BY JOHN MAX HARK, D.D., OF LANCASTER, PENNSYLVANIA.

On this occasion, when you are gathered together here, as representatives of the noble cause of popular education, to call to remembrance the services rendered that cause by one of its most heroic pioneers, it is but natural and altogether proper that most stress should be laid on Comenius the schoolman. Yet will it not be deemed improper, I trust, if I briefly speak of him simply as a man—the man whose intense patriotism and fervent piety, whose loyalty to his country and his God, were the very traits out of which grew all his educational work, and an acquaintance with which will help to make the latter more correctly and fully understood.

There are several portraits of John Amos Comenius extant, all of which agree in representing him as a man of stately bearing, dignified and venerable; with a face refined and eminently intellectual, crowned with a high forehead; a heavy beard covers his long chin and partly hides a sensitive mouth, while the soft, gentle eyes are full of a profound sadness, that gives to the whole expression a sorrowful cast as pronounced as that on Dante's face; but, in place of the settled gloom and sternness of the latter, there is markedly present a look of tender yearning, and even of confident hopefulness. Perhaps this latter, however, would not appear so plainly in his outward features did we not know it to have been a leading feature of his soul. At all events, whether visible in the flesh or not, these characteristics were all present in his life. They are clearly revealed in all his works, and shine forth distinctly through all his history, which is preëminently that of one who, with Lowell, could say:

> "'Tis sorrow builds the shining ladder up,
> Whose golden rounds are our calamities,
> Whereon our firm feet planting, nearer God
> The spirit mounts, and hath its eyes unsealed."

A less large-hearted man, one whose sympathies and interests had been narrower and less all-embracing, might perhaps, even in those terrible times in which Comenius lived, have been capable of some comfort, at least contentment, and even enjoyment. But not so he, whom Herder aptly describes as "a noble priest of humanity," and one "whose single end and aim in life was ever the same—the welfare of his brethren, *i.e.*, of all mankind." He was "a man of sorrows and acquainted with grief," in the same sense as He whom the Hebrew prophet describes; for he bore not only his own personal trials, but the burdens of all his people as well, because of the fervor of his patriotism and the depth of his devotion to his brethren in the faith, and his "dear mother" the Church of the Unitas Fratrum.

Well might his personal afflictions alone have crushed and overwhelmed his spirit had he been cast in a less heroic mold. Born at Niwnitz, a market-town in Moravia, on March 28, 1592, the cup of bitterness was offered him early to drink; for when scarce ten years old he lost his father, and two years after his mother. His guardians, he tells us in his "Prodromus," neglected him, though he was sent to the schools of the Church of which his parents had been devout members, thence to the theological seminary in Nassau, and two years after to the University of Heidelberg. If he ever enjoyed a season of comparative freedom from care, it must have been during this period, and when after graduation he traveled in Holland, and probably to England. Scarce was he settled as pastor at Fulneck and rector of its schools, a few years after, when the prolonged horrors of the Thirty Years' War began. Fulneck was sacked by Spanish mercenaries, Comenius's dwelling and school destroyed, and his entire library with all his manuscripts burned, while he himself had to hide, and finally flee for refuge to Brandeis on the Adler. Here, to add to his sorrows for his countrymen and brethren, his young wife and her babe both died that same year, leaving him homeless, childless, wifeless—desolate indeed, and well-nigh in despair. But the Divine Helper was at hand, to prove to him that—

> "Through the clouded glass
> Of our own bitter tears, we learn to look
> Undazzled on the kindness of God's face."

The cellar of the house is still shown, and near it a stone memorial erected in 1865, where, one sleepless night, he sprang from his couch to find in the Word of God the comfort denied him of men. It came to him while prayerfully reading Isaiah's marvelous prophecies, and straightway seizing his pen he wrote for the help of others in like distress his spiritual experiences, his struggles in the slough of despond, and his final triumph through the manifestation in his heart of the Saviour himself, the Suffering One, revealing unto him the mysteries of joy in pain, and victory in defeat.

Scarce was he married again when his refuge at Brandeis had to be abandoned, and he became an exile from his country and a pastor of the congregation of refugees at Lissa, in Poland, fulfilling in his own experience what had been foretold the banished Florentine poet in such touching words:

> "Thou shalt abandon everything beloved
> Most tenderly, and this the arrow is
> Which first the bow of banishment shoots forth.
> Thou shalt have proof how savoreth of salt
> The bread of others, and how hard a row
> The going down and up another's stairs."

There, though he dwelt in outer security for about twenty-eight years, he lost his second wife, Bishop Cyril's daughter, after she had borne him one son and four daughters; and later, in 1656, at the capture of Lissa from the Swedish invaders, went through the same bitter experience as at Fulneck, again losing his entire very valuable library with all his other property, and once more being forced to flee for safety to another land, finally settling at Amsterdam. Well might the aged man pathetically exclaim at the end of his career: "My whole life was merely the visit of a guest; I had no fatherland."

Yet he never complains of his own troubles. His lamentations are all for his country and his Church, often coupled with stern reproof for their past sins and shortcomings. We can well believe that to such a man his own tribulations were the least part of his sufferings. His worst trial was to behold his beloved native land bleeding from many wounds, invaded, and trodden ruthlessly under foot by a foreign foe, until not one in three of its inhabitants was left; and to see his dear Church persecuted, pursued, driven from her strongholds, her members killed or scattered, and she, a second Rachel, weeping for her children because they were not. Not his own, but the pain of others, pained him most. For his was a sensitive, profoundly sympathetic nature. He loved his country with a deep and true love, and was attached to his Church with the tender affection of a child for its parent. We have proof of this at the very beginning of his priesthood, when the intrigues, injustice, and cruel oppression of the Jesuits were forcing Bohemia and Moravia into revolt against their faithless sovereign, and at Fulneck he wrote his "Cry of the Oppressed Poor to Heaven," in which he passionately bewailed the lamentable condition of his people. We note it in his "Citadel of Security," composed during his enforced leisure at Brandeis, in which he tried to cheer and encourage them in their afflictions. His letters to Oxenstiern, just before the treaty of Westphalia, when he learned how Sweden was about to break all her promises with regard to restoring the Moravian exiles and protecting them in their political and religious rights, show

how deeply pained he was at heart, at the same time that they are bold protests, and cutting reproofs of the wrong, full of the courage and devotion of a pure-minded patriot; as are also his words on the same subject in his History. If it be true, as has been asserted, that Comenius aided and abetted the Swedes in their invasion of Poland and capture of Lissa, it is but evidence of the same sentiment. He still hoped that Sweden might restore his exiled people and Church to their homes. He hailed the invader because he looked upon him as a liberator of his native land. Nor did his sympathy and love grow cold when afterward, far away at Amsterdam, he used his high position and influence to raise large sums of money for the exiles, to gain positions for hundreds in England and Sweden, and to make Amsterdam itself an asylum and headquarters for banished Moravian and Bohemian Protestants.

Never was pastor more self-sacrificingly loyal to his flock than he, from the day of his ordination in 1616 to the end of his life. Even after the sack of Fulneck he continued visiting and secretly ministering to the members there from his hiding-place in the forest. Before finally leaving Bohemia, he had made a perilous journey in behalf of the Church to find an asylum in Poland or Hungary. Afterward, at Lissa, in Amsterdam, wherever he was and however busily engaged, he ceased not to pray and care for his brethren, remaining their true and faithful bishop to the end; in pastoral letters, preached and printed sermons, and on frequent visitations, admonishing, instructing, cheering, and encouraging them as a friend and spiritual father and guide. Did his duty to his Church call, he was ready at any time to drop his school-work, as he did at Prerau, in order to obey what he deemed his highest call. For first and foremost he was and always remained a pastor, and a minister of the spiritual mysteries of God. An ardent patriot he was; a famous educator, scholar, and author, whom princes loved to honor; but before all else he was a Bishop of the Unitas Fratrum.

Yet we should make a great mistake did we suppose that his restless zeal and untiring labors were prompted only by pity and the desire to afford temporary relief to the oppressed. His motive was a deeper, higher one, and sprang from the very distress and suffering of his own soul and of his dearly loved Church and country. Deeper than all his pain and anxiety, more basal and abiding than any mere emotion or occasional depression of spirit to which he was subject, was the firm, unwavering, ever-present hope, the truly prophetic conviction, that from the present death that was threatening there would be a resurrection into a new and better life, when the scattered members should be gathered together from the four quarters of the earth, and the essential Unitas Fratrum should renew her youth as the eagle's. He mourned indeed and lamented at the evident signs of decadence and decay which his clear vision could not fail to see in the exiled Church, even in the midst of her outer security and seeming prosperity in

Poland. He felt that she was slowly dying. But he knew that the good and true in her could never die. And this made him confident and strong. Sense and reason, looking only at the things which are seen and are corruptible, told him the end was drawing nigh. But faith and hope, with steadfast face beholding, assured him of things not seen and eternal. In the face of apparent defeat, destruction, and ruin for all that he loved best, the heroic man deliberately planned and persistently worked for a future that never seemed more distant, more chimerical, more utterly impossible than it did then; namely, the restoration of his people to their native land, and of his Church to her original purity and strength. From this time forth to the end of his days, though the prospects grew darker and ever darker, he lived and labored *in spem contra spem*. How was this restoration to be accomplished? He did not know. When would it be brought to pass? He did not ask. All in God's own time and way. Sufficient for him that it surely would be done. So that all his energies were bent to fit and prepare his people for the event when it should come.

To this end, he reasoned, two things were essential: First, education, popular, universal; the education of men for manhood, with all its rights and duties; "for all who have been born human beings," to use his own language, "general instruction to fit them for everything human." Secondly, the maintenance of the old spiritual landmarks; keeping in remembrance the original principles and ideals, and in order to this, as far as possible, the pure practices and discipline of the Church, so that among the exiles themselves there should be left a remnant at least, a "hidden seed," from which the new growth might spring up and multiply.

If the renewed Bohemia and Moravia were ever to become a permanent reality, it must be with a people renewed in intelligence and virtue. With the capture of Prague, a systematic crusade had begun against all institutions of higher and popular learning, and the destruction of everything literary that was not distinctively Roman Catholic. Protestant and Catholic historians alike bear testimony to the consequent lamentable decay of all learning and literature. Says one of the latter: "I do not know of a single scholar, subsequent to the expulsion of the Protestants, who distinguished himself by his learning. . . . Throughout the kingdom nearly all the schools were in the hands of the Jesuits or the ecclesiastical orders, and little more than bad Latin was taught." Under such circumstances, Comenius knew there could be no such thing as a permanent rejuvenation of his fatherland; for a people's prosperity is dependent upon its intelligence, and a nation's stability upon the righteousness of its inhabitants. Hence, to prepare the rising generation for the new era that was to dawn, he set to work—in the language of the latest historian of the Unitas—"to lay the foundation of an educational system, simple in its structure, suitable to the minds of children, exercising their faculties, fitting them for

the most important avocations of life, and preparing them for their eternal mission. . . . 'From the school there should proceed a new people; from the family, a new school.'"

It was with this end in view that, soon after his arrival at Lissa, and even before assuming the rectorship of the college there, he began his series of educational works on which his fame in the world at large is chiefly based, and whose value and importance are to be treated later in this evening's exercises by those more competent than I to speak authoritatively on the subject. Nor need I dwell on how these writings at once attracted all the civilized world's attention, and made kings and parliaments solicit his aid in reforming their systems of instruction; how he went to England, Sweden, Holland, Transylvania, was wanted in France, and almost came over here to America, as Cotton Mather tells us, "to Illuminate this Colledge and Country in the Quality of President" of Harvard; how his plans grew, and his purpose broadened, till it embraced all knowledge for all mankind—all this is well known to you.

When we remember that all the time that he was engaged in this educational work he was also, since his consecration in 1632, bearing the responsibilities and faithfully performing the labors pertaining to the holy office of bishop, the general oversight of the scattered church, his immense official and private correspondence, attending synods and conferences, until his resignation in 1641 acting as rector of the college at Lissa, whose entire constitution and system of instruction he radically reformed; and, finally, besides his sermons, also prepared and published, in accordance with his fixed general purpose of fitting his people for their final restoration, his edition of "Lasitius's History of Bohemia," with a lengthy introduction and conclusion of his own; the very next year, 1650, wrote his pathetic and beautiful "Last Testament of the Dying Mother, the Brethren's Unity," instinct with faith and love and hope, and that broadly catholic spirit which so distinguished him; published a new edition of his translation of the "Ratio Disciplinæ," with a new dedication and exhortation, besides a "Biblical Manual," and many other theological and devotional works—when we remember all this, I say, we cannot but be amazed both at the fertility of his mind and the stupendous energy and capacity for work of this wonderful man. Never was a fuller, more laborious life.

His originality probably nowhere shines forth more clearly than in his educational work. Yet such was his humility that he did not undertake the promulgation of his ideas until he had reluctantly been forced to the conclusion that there was no system of education then extant which would fulfil the large purpose and noble end he had in view. He was a stranger to anything like selfish ambition, and could honestly affirm "that these forty years my aim has been simple and unpretending, indifferent whether I teach or be taught, admonish or be admonished, willing to act the part of

a teacher of teachers, if in anything it be permitted me to be so, and a disciple of disciples where progress may be possible."

As characteristic as his humility was that eminently practical turn of mind—sound common sense we now would call it—which distinguishes his educational writings, though not more than his religious works and his official and private course of action everywhere. It was this that made him the thorough realist he was in all pertaining to the practical life of men; and it is all the more marked because along with this trait there was also unmistakably present in his mind a decided vein of mysticism, which at one time led him temporarily astray in his theological views. Is this not often so, that mysticism and the most practical realism go together? Are they not perchance only two phases of one and the same fundamental character, and that, too, of the strongest, grandest, and best characters produced in our humanity? They are the poet's distinction, the true poet, who is not less a "maker" because also a dreamer; and the prophets as well, if indeed poet and prophet be not one and the same, whose

> "Clearer eye should see, in all
> Earth's seeming woe, the seed of Heaven's flowers."

And Comenius had a poet's spirit, as his exquisitely conceived and written "Labyrinth of the World and Palace of the Heart" would alone be sufficient to prove—a prose poem written in his retreat at Brandeis, and still popularly read and prized as one of the gems of Bohemian classic literature—every way worthy to be called the forerunner of Bunyan's somewhat similar allegory.

Certainly in Comenius the practical and the mystic were closely joined, the accompaniments, if not the result, of an unusually refined, gentle, sensitive nature. The latter's fate it always is to be most liable to be tossed between the extremes of hope and fear; even as Comenius not seldom suffered from gloom and despondency, and then again rose to almost ecstatic heights of sanguine hope and expectation. Yet seldom did this really unbalance him. It went no deeper than his feelings. The sound, practical element invariably asserted itself, having the deeper hold on his nature, controlling his judgment and reason. While deeper even than this, enduring, persistent, unshaken by storms of circumstance or ebb and flow of passion, the *primum mobile* of his being was his firm faith in God, and fixed confidence in the justice and truth of him who is the Eternal Love.

It was this, rooted in his strong Czech character, that was the basis of that pertinacity of purpose and persevering hopefulness in the midst of defeat, disaster, and every opposition and contradiction, that gave him the clear gaze of a seer into the future, the firm utterance of a prophet of the Unitas Fratrum. When in midwinter of 1628, at the head of a band of refugees, he crossed the frontier mountains between his home and the

land of exile, looking back for the last time through his tears to behold his dear fatherland once more, he knelt down on the snow-covered mountain top and broke forth in this impassioned cry to his God: "Wherefore dost Thou forget us forever, and forsake us for so long a time? Lead us back to Thee again, so that we may again return home. Renew our days as of old!" And ever after he trusted in the fulfillment of that petition; he looked for it; he relied on it with absolute confidence and faith. All his activity thenceforth was carried on in view of the accomplishment of this prophetic hope. To this end his scholastic work was prosecuted; to this end his History was written; to this end his Church's "Confession of Faith" republished, and the "Biblical Manual," and the Bohemian and German "Hymnals," and the "Catechism for the Scattered Sheep of Christ;" and to this end, finally, and most important and significant of all, his second edition, in 1660, of the "Ratio Disciplinæ," with its strikingly prophetic dedication "To the Anglican Church, heretofore driven about by manifold stormwinds, but now seeing before her a haven of rest." By these publications he meant to keep firm the principles of the scattered brethren, the hidden seed of the future, to stir up their zeal, strengthen them in their patient waiting, and keep pure their original doctrine and discipline; and, on the other hand, he solemnly charged the Anglican Church tenderly to care for "our dear mother" the Unitas Fratrum, in her seemingly dying condition, until her restoration either in the home of her fathers or in some other land. "Whether God will deem her worthy to be revived in her native land," he writes, "or let her die there and resuscitate her elsewhere, in either case do you, in our stead, care for her. . . . You ought to love her, because in her life she has gone on before you, for more than two centuries, with examples of faith and patience. . . . We certainly ought to take care that such gifts may not perish with us, and that amidst disorder and confusion, as these now exist, the foundations of our Unity may not be so entirely ruined as to make it impossible for our posterity to find them." The whole work is aglow with a broad Christian charity and a catholicity far in advance of his times—scarce yet reached, alas! in our own.

He was indeed zealous for his Church, but not with the zeal of a bigot or sectary. In all his life and works he proved the sincerity of his noble words: "Let separate churches pass away, and ours with them, only let nothing that is good be lost, but rather be gathered into the common treasury of the Church universal." By word and example he labored for true Christian union everywhere. "Let all sects," he exclaims, "with their sympathizers and supporters go to nought. I have dedicated myself to Christ alone. . . . He knows no sects, but hates them, and hath given peace and mutual love to his own as their inheritance."

All this is in perfect keeping with those true and precious utterances wherewith he brought his literary labors to a close in his "Unum Neces-

sarium," which, he says, "John Amos Comenius, a Sire, in his seventy-seventh year, exhausted by the Unnecessary Things of Earth, and striving for the One Thing Needful, sets forth for the Consideration of the World." Well has it been said of this: "He has left no richer legacy. It is a solemn farewell spoken to the world by a grand old man; it is an aged saint's anticipation of coming glory." It is indeed the fit expression of a character such as is beautifully summed up by the historian Palacky: "In his intercourse with others Comenius was in an extraordinary degree friendly, conciliatory, and humble; always ready to serve his neighbor and sacrifice himself. His writings as well as his walk and conversation show the depth of his feelings, his goodness, his uprightness, and fear of God. He never cast back upon his opponents what they meted out to him. He never condemned, no matter how great the injustice which he was made to suffer. At all times, with fullest resignation, whether joy or sorrow was his portion, he honored and praised the Lord."

It is a satisfaction to know that the hopes and prophecies of this servant of God were, partially at least, fulfilled not many years after he himself had passed away, and that his own writings had so much to do with bringing that fulfillment about. Refugees from each of the eight congregations to whom his Catechism had been addressed by name helped to organize the Renewed Unitas Fratrum, soon after the beginning of Herrnhut in 1722; while the very aim with which his "Ratio Disciplinæ" had been republished was reached when Count Zinzendorf by reading it was constrained, as he himself tells us, to devote himself to the upbuilding of the Church on its original foundations. Moreover, through Bishop Jablonsky, Comenius's grandson, the last Bishop of the Ancient Church, whom he had helped to consecrate in 1662, the Episcopal succession was handed down to the Renewed Church, when he consecrated David Nitschman its first Bishop in 1735, but sixty-four years after the venerable saint had gone up higher, on November 15, 1670, in the seventy-ninth year of his pilgrimage, at Amsterdam. In the neighboring town of Naarden his dust lies buried, under the floor of the military barracks there, with no memorial of any kind, not even a tombstone to mark the spot—nor need of one—where lies he of whom we may as truly say as did Ben Jonson of Shakespeare,

> "Thou art a monument without a tomb,
> And art alive still, while thy work doth live,
> And we have wits to read, and praise to give."

II.

The Text-books of Comenius.

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"The special aims of pedagogy," says Comparye, "are essentially related to the general aims of science. All progress in science has its corresponding effects on education. When an innovator has modified the laws for the discovery of truth, other innovators appear, who modify, in their turn, the rules for instruction." Comenius was such an innovator. Men had been studying words without meanings, propositions without contents, and abstractions without realities. Francis Bacon had turned their intellectual efforts in another direction, toward the observation of nature, the study of concrete things, the formulation of laws not deduced from barren abstractions, but generalized from, and verified by, experience. Comenius sought to apply the rules of the Baconian philosophy to education. What his system is, what are the principles of his educational philosophy, will be set forth by Dr. Butler. As a prelude to his address, I have the honor to invite your attention for a few minutes to the school text-books Comenius wrote and left behind as a monument to his genius and his industry.

"Latin," says Comenius, "is the one language to be preferred to all others for schools, because it is the vehicle not only of Roman, but of all learning, and because it is the common language of the learned." But in what a deplorable condition was the teaching of Latin when Comenius first addressed himself to its reform? In 1614 Eilhardus Lubinus, an eminent theologian who edited the Greek Testament in three languages, as quoted by Professor Laurie, says of the teaching of Latin in his day: "When considering this matter I have, to speak the truth, been often led to think that some wicked and malign spirit—an enemy of the human race—had, through the agency of some ill-omened monks, originally introduced the method of instruction. And with what result? The production of Germanisms, barbarisms, solecisms, mere abortions of Latin, dishonorings and defilements of the tongue." In his *Novissima Linguarum Methodus* Comenius enumerates the evils of existing methods of teaching Latin. It is taught abstractly without a prior knowledge of the things which the words denote; Latin grammar is taught not only before a Latin vocabulary is acquired, but before the grammar of the vernacular is studied, and that, too, in the unknown Latin tongue; and, lastly, boys are compelled to take impossible leaps, from a grammar whose rules are meaningless to a literature that is beyond their comprehension, instead

being carried forward step by step from the easy to the more difficult, from the simple to the complex.

To remedy these evils Comenius projected, in 1628, a first Latin book in which, to quote his own words as given by Professor Laurie, "all things, the properties of things, and actions and passions of things, should be presented, and to each should be assigned its own proper word, believing that in one and the same book the whole connected series of things might be surveyed historically, and the whole fabric of things and words reduced to one continuous context."

While meditating on this project, there fell into his hands a book which, he tells us, made him leap for joy. It was the *Janua Linguarum*, written by William Bath, an Irishman, born in Dublin, who was educated at Bauvais and Padua, and who spent the greater part of his mature years as Spiritual Father to the Irish Jesuit College at Salamanca, in Spain. This book was an attempt to arrange in twelve hundred short sentences all the common root-words in the Latin language. No word was repeated, and the Latin was accompanied by a word-for-word Spanish translation. This work, however, upon examination, did not satisfy the Moravian scholar, as it did not even pretend to connect the study of words with the study of things. And so, in 1631, he published his *Janua Linguæ Latinæ Reserata.* The full title is: "The Gate of Languages Unlocked; or, The Seminary of all Languages and Sciences;" that is, a compendious method of learning Latin, or any other tongue, along with the elements of all the sciences and arts, comprehended under a hundred chapter-headings and in a thousand sentences. The thousand sentences comprehended eight thousand different words, the Latin and the German equivalents being in parallel columns.

The sentences are simple at first, but afterward complex and compound. The subjects treated range from herbs and shrubs to dialectic, rhetoric, and geometry. The book was immensely popular, and was soon translated into nearly all the European and some Asiatic tongues. The "Vestibulum," an easier book on the same plan, was published in 1632 as an introduction to the "Janua." To the second edition of the latter work an easy grammar and an etymological lexicon were attached. The next book of the series, the "Atrium," in which the sentences are longer and more involved than in the "Janua" and "Vestibulum," is intended to serve as an introduction to the highest book of the series, the "Palatium; or, Palace of Authors."

Comenius not only wrote text-books, but he laid down strict rules for the method of study. I summarize the account of his method from Professor Laurie's exhaustive treatise on his life and writings. Each book was to be read ten times. At the second reading the whole should be written out, vernacular and Latin, and the teacher should begin to converse with his pupils in the Latin tongue. At the third reading the

teacher is to read the Latin aloud, and the pupil is to translate in the vernacular without seeing the printed page, and at the same time he is to copy out the syntactical grammar. At the fourth reading the remainder of the grammar is to be written out, and the words in the "Janua" are to be parsed. At the fifth reading special attention is to be given to the derivation of words. At the sixth reading synonyms and paronyms are to be explained. At the seventh reading the syntactical rules are to be written out once more, and examples under each rule collected from the text. At the eighth reading the pupils are to learn the text by heart. The ninth reading is to be devoted to a logical analysis of the subject-matter; and the tenth perusal is to be conducted by the boys challenging one another to repeat portions of the text.

All the while Latin compositions are to be written, "the vernacular being constructed by the teacher (apologues, fables, etc.) out of the words in the 'Janua' and its lexicon, and translated into Latin by the pupils. The afternoon is always to be spent in writing out the morning's work."

This method, it will be readily admitted, was sufficiently thorough. Indeed, it may well be questioned whether Comenius's plan of several readings, each with a distinct object in view, is not very much better than the system now in vogue—that of a single reading in which translation, composition, syntax, meaning, and analysis are all attempted at the same time.

In 1657, Comenius, probably finding his series too elaborate, published a simpler and better book than any of those mentioned. It is entitled *Orbis Sensualium Pictus*, "A World of Things Obvious to the Senses, drawn in Pictures." The pictures were made by Michael Endter, of Nuremberg, and are rude and ungainly to the last degree. All the same, however, they made the "Orbis" "the first children's picture-book," and for at least fifty years the most popular school-book in the world. From it mothers taught their children. From it schoolmasters taught not only Latin, but the vernacular of every language in Europe. From it many a boy gained his first general notions of the outside world, an acquaintance with things beyond the sphere of his daily life, strong impulses toward what is right and noble, and withal a mastery of the Latin language.

"The ground of this business," says Comenius, as translated in 1658 by quaint Charles Hoole, a schoolmaster of London, "the ground of this business is that sensual objects may be rightly presented to the senses, for fear they may not be received. I say, and say it again aloud, that this last is the foundation of all the rest: because we can neither act nor speak wisely, unless we first rightly understand all the things which are to be done, and whereof we are to speak. Now, there is nothing in the understanding which was not before in the sense. And therefore to exercise the senses well about the right perceiving the differences of things, will be to lay the ground for all wisdom, and all wise discourse, and all discreet actions in one's course of life."

Comenius's objects in this book may be summarized under three heads: First, to give an outline of all knowledge before anything is taught in detail; second, to connect a knowledge of things with the words which stand for them, both in a vernacular tongue and in Latin; and, third, to give a Latin vocabulary extensive enough for all the requirements of life. To serve these purposes, pictures alone, he is never tired of insisting, are not sufficient. The objects themselves must be closely examined; while the pictures should be not only observed and talked about, but imitated in drawing. He has thus fairly earned the title of first of the sense realists. But I now propose to let the pictures speak for themselves.

In Section I., labeled "Invitation," we are introduced to the boy, a plump but not a pleasing person, and to the master, a man "severe" and "stern to view," who has evidently all the frowns and none of the jokes of Goldsmith's schoolmaster. They are conversing on a barren plain, the only other living thing in sight being a wild animal apparently of some extinct species. In the background are a village church of the regulation pattern, the roofs of houses, and a couple of pyramids which are intended for mountains, but which look suspiciously like hayricks. The master invites the boy to "understand rightly, to do rightly, and to speak out rightly all things that are necessary." The boy answers, "See, here I am; lead me in the name of God."

And now we enter upon what, were we to judge from the pictures alone, might well be regarded as an unknown land. Comenius's artist sticks at nothing. He is ready to give pictorial representation to anything in the heavens above, or in the earth beneath, or in the waters under the earth. So grotesque are the forms depicted that one could almost imagine them pictures of life in another strange land discovered in a fifth voyage by Gulliver.

The gateway of this strange land is what Comenius calls a lively and vocal alphabet. With each letter is given a drawing more or less—generally more—unlike some creature whose sounds are supposed to represent the sound of a letter. "The crow crieth" gives the sound of *a*. "The lamb blaiteth" gives the sound of *b*. "The grasshopper chirpeth" gives the sound of *c*.

The remaining sections of the "Orbis Pictus"—one hundred and fifty in number—are each and all arranged on the same plan. An illustration is placed at the head of the section. The subject matter is given in two parallel columns—in the original, Latin and German; in the edition from which these pictures are taken, that published by Mr. C. W. Bardeen, Latin and English. Each detail in the verbal description has a number, and the same number is attached to the corresponding part of the pictorial representation.

In Section III., a representation of the world, we have a wood-cut showing an exceedingly ugly man and woman. One can fancy either one of

them saying, in the words of Touchstone: "A poor, ill-favored thing, sir, but mine own." The man sits on the edge of a boulder overlooking a sheet of water, on which are depicted a whale and a couple of seals. On the mudbank to the left are a horse, a bear, a lion, and a duck. Behind the mudbank rises a mountain covered with trees of the Noah's ark description; while eleven stars, a bank of clouds, and nine birds, one of portentous size, diversify the heavens. Underneath the picture is the lesson: "The heaven, 1, hath *fire* and *stars*. The clouds, 2, hang in the air. Birds, 3, fly under the clouds. Fishes, 4, swim in the water. The earth hath hills, 5, woods, 6, fields, 7, beasts, 8, and men, 9. Thus the greatest bodies of the world, the four elements, are full of their own inhabitants."

After this bird's-eye view, so to speak, of the world, Comenius passes to heaven, and then treats of fire, air, water, and clouds. In the section on air, however, he allows himself to depart so far from realism as to inform us gravely that "a wind under ground causeth an earthquake." So difficult is it for even the professed realist to be always realistic.

The next half dozen chapters are devoted to the fruits of the earth, which the artist makes anything but "pleasant to the eye." Out of gratitude, doubtless, to the Dutch, among whom he had found an asylum from persecution, he says of the tulip that it is *decus florum sed expers odoris.* "It is the grace of flowers, but affordeth no smell."

We now come to animals. A living creature Comenius defines thus: "A living creature liveth, perceiveth, moveth itself; is born, dieth; is nourished and groweth; standeth, or sitteth, or lieth, or goeth." The words of the definition are determined, you will observe, not more by the connotation of the term defined than by the necessity of introducing certain new words in the Latin tongue. Our author tries to teach a knowledge of all things visible and invisible, and at the same time to impart a Latin vocabulary coextensive with this knowledge.

Several sections are devoted to birds, upon some of which he is quite severe, as when he says: "The owl is the most despicable; the whoopoo is *sordidissimus*, the most nasty." In some cases his zoölogical scholarship is doubtful, as when he tells us that "the bittern putteth his bill in the water and belloweth like an ox;" or that the wild goat hath "very little horns," "by which she hangeth herself on a rock." Realist though he is, it seldom occurs to Comenius to question popular superstitions, for he tells us that "the unicorn hath but one horn, but that a precious one;" and that the dragon is "a winged serpent which killeth with his breath." Nor did he hinder his artist from distorting the actual in order to present a more complete view, as when he represents fish as swimming *on*, never *in*, the water.

Next we come to *man*. After an illustrated version of the story of Adam and Eve and the serpent and the forbidden tree, he gives, in Section

XXXVII., a picture of "the seven ages of man." We see the infant (1), the boy (2), the youth (3), a young man (4), a man (5), an elderly man (6), a decrepit old man (7). So, also, in the other sex, he continues: there are a girl (8), a damosel (9), a maid (10), a woman (11), an elderly woman (12), and a decrepit old woman (13). How faint an illusion on the mind would be produced by even a good picture of the seven ages when compared to that which flows from Jaques's noble speech in "As You Like It." After all, there is no artist like the artist in words.

The outward parts of a man, the head and the hands, the flesh and the bowels, the "chanels" and the bones, are treated in as many lessons, in a manner not materially different from that in which they are presented in modern object lesson-books; that is, in the true dry-as-dust style. But in Section XLII., "The Outward and Inward Senses," we have a picture that shows no small amount of ingenuity. In the center is a human head with a portion of the skull removed so as to show the convolutions of the cerebrum. Surrounding the head are the organs of the special senses. "The eye (1) seeth colors, what is white or black, green or blue, red or yellow." "The ear (2) heareth sounds, both natural, voices and words, and artificial, musical tunes." "The nose (3) scenteth smells and stinks." "The tongue (4) with the roof of the mouth tastes savors, what is sweet or bitter, keen or biting, sour or harsh." "The hand (5), by touching, discerneth the quantity and quality of things, the hot and cold, the moist and dry, the hard and soft, the smooth and rough, the heavy and the light."

The second part of this lesson, on the inward senses, is not farther removed from the comprehension of children than it is from our knowledge of the brain as developed by physiological psychology. "The common sense" (7), he says, "under the forepart of the head, apprehendeth things taken from the outward senses. The phantasie (6), under the crown of the head, judgeth of those things, thinketh and dreameth. The memory (8), under the hinder part of the head, layeth up everything and fetcheth them out; it loseth some, and this is forgetfulness."

The artist who made pictures for the "Orbis Pictus," as I have said, sticks at nothing. He has all the courage of Comenius's convictions. The last picture shows that he would leave nothing to the imagination of the child—that he would not have him learn the Latin for ear or tongue without a picture of the thing. He has his imitators in modern days among those who would not allow a child to learn to read the word "cat" without seeing a picture of that "necessary, harmless" animal. But no modern "fad" has been carried so far as Comenius carries his in Section XLIII., where he attempts the impossible, and presents us with a picture of "The Soul of Man." It is the outline of the human body thrown on a sheet. The first sentence of the text supplies a key to what at first sight seems inexplicable. "The soul," says Comenius, "is the life of the body,

one in the whole." Then he continues: "The soul is only vegetative in plants; withal sensitive in animals; and also rational in man. This consisteth in three things: In the understanding, whereby it judgeth and understandeth a thing good and evil, or true, or apparent. In the will, whereby it chooseth and desireth, or rejecteth, and mistaketh a thing unknown. In the mind, whereby it pursueth the good chosen, or avoideth the evil rejected." Hence is hope and fear, love and joy, anger and grief. "The true judgment of a thing," he adds, "is knowledge; the false is error, opinion, and suspicion."

In Section XLIV. attention is directed to "Deformed and Monstrous People." There is, as you see, a giant, a dwarf, and a two-bodied monster. In addition to these unhappy persons, he enumerates among monstrosities "the jolt-headed, the great-nosed, the blubber-lipped, the blub-cheeked, the goggle-eyed, the wry-necked, the great-throated, the crump-backed, the crump-footed, the steeple-crowned," and, growing rather personal, "the bald-pated." Evidently he was very far from having reached the idea that the human animal, when it attains complete development, will be hairless.

The remainder of the book is occupied chiefly with men's occupations. Like Juvenal, he makes *quidquid agunt homines* the chief theme of his book.

The lesson on hunting, Section LIII., is very amusing. The hunter, *venator*, on horseback, is in the act of piercing a wild boar with a great spear. The boar is closely pursued by a beagle, while *vertagus*, the "tumbler or greyhound," gallops along in front, pursued rather than pursuing. A very melancholy bear, held fast by a dog, is belabored by a man with a huge club. The stag is making straight for the "toyls." A wolf (6) has fallen into a pit, while two nondescript animals, labeled "hare" and "fox," are making off over the hill; and this leads our author to remark, somewhat after the manner of Dogberry, that "if anything get away, it escapeth." The time when mercy to the lower animals should be preached as a part of the moral law binding on all human kind had not yet arrived. Yet in our own day field sports are not a whit less cruel than in the days of Comenius.

Of the lessons on particular trades, Section LXIV., that on the carpenter, will give a good idea. "We have seen man's food and clothing," says Comenius, "now his dwelling followeth. At first they dwelt in caves (1), then in booths or huts (2), and then again in tents (3), at the last in houses. The woodman felleth and heweth down trees (5) with an ax (4), the boughs remaining. He cleareth knotty wood with a wedge, which he forceth in with a beetle (8), and maketh wood-stacks (9). The carpenter squareth timber with a chip-ax, whence chips (11) fall; and saweth it with a saw (12), when the saw-dust falleth down. Afterwards he lifteth the beam upon tressels (14) by the help of a pulley (15), fast-

eneth it with cramp-irons (16), and marketh it out with a line (17). Thus he frameth the walls together, and fasteneth the great pieces with pins."

In Section XCVIII. we have the picture of a school as it was in the first half of the seventeenth century. "A school," the "Orbis Pictus" tells us, "is a shop in which young wits are fashioned to vertue, and it is distinguished into forms. The master sitteth in a chair; the scholars, in forms. He teacheth, they learn. Some things are writ down before them with chalk on a table. Some sit at a table and write; he mendeth their faults. Some stand and rehearse things committed to memory. Some talk together, and behave themselves wantonly and carelessly. These are chastened with a ferrula and a rod."

The next picture might be taken for the original of Shakespeare's

> "lean and slipper'd pantaloon,
> With spectacles on nose, and pouch on side.
> His youthful hose, well sav'd, a world too wide
> For his shrunk shank."

But it is only the student in his study. "He picketh all the best things out of books," says Comenius, "into his own manual, or marketh them in them with a dash, or a little star, in the margent. Being to sit up late, he setteth a candle on a candle-stick, which is snuff'd with snuffers. Before the candle he placeth a screen, which is green, that it may not hurt his eye-sight; richer persons use a taper, for a tallow candle stinketh and smoaketh."

In Section C. there are four female figures; and I venture to say that no one who has not read the book will guess what they are intended to represent. The figure to the extreme left represents Grammar, which is "conversant about letters, of which it maketh words, and teacheth how to utter, write, put together and part them rightly"—an infinitely better definition than Lindley Murray's. The second figure is Rhetoric, which "doth as it were paint a rude form of speech with oratory flourishes." The third is Poetry, which "gathereth these flowers of speech and tieth them as it were into a little garland and so making of prose a poem." The fourth is Music, which "setteth tunes with pricks, to which it setteth words, and so singeth alone, or in consort, or by voice, or musical instruments." The lady is evidently performing a solo, to the great distress of Grammar, Rhetoric, and Poetry.

After a lesson on musical instruments we are somewhat abruptly introduced, in Section CII., to Philosophy. In the in-door scene to the right there is a table with a heap of counters and a slate on which is written some kind of arithmetical problem; just what it would be difficult to say. Metaphysicus, the supernaturalist, who "searches out the causes and effects of things," is saluting Physicus, the naturalist, who "vieweth all

the works of God in the world." Apparently Comenius desired to impress upon his readers the superiority of Physicus over Metaphysicus.

In Section CIII. we get the first glimpse of geometry. "A geometrician," we are told, "measureth the height of a tower, or the distance of places, either with a quadrant or a Jacob's staff. He maketh out the figures of things with lines, angles, and circles, by a rule, a square, and a pair of compasses. Out of these arise an oval, a triangle, a quadrangle, and other figures." And so endeth the first lesson in geometry.

To geography two sections are devoted, and they are chiefly valuable as showing the deplorable condition of geographical knowledge so late as the middle of the seventeenth century. The first gives us a map of the hemispheres, and in the attached lesson we are gravely informed that "The ocean compasseth the earth about, and five seas wash it, the Mediterranean Sea, the Baltic Sea, the Red Sea, the Persian Sea, and the Caspian Sea. Besides," he adds, "the earth is divided into three continents, this of ours, which is subdivided into Europe, Asia, and Africa; America, whose inhabitants are antipodes to us, and the South Land, yet unknown." To cap the climax, the lesson ends with the truly extraordinary statement, "Infinite islands swim (*natant*) *in* the sea." With the change of a single inflection, he might have applied to his islands the words of Vergil describing Æneas's ship-wrecked sailors, *raræ nantes in gurgite vasto.*

In the second lesson on geography, Section CVIII., we have a map of Europe, on which are depicted twenty-eight chief kingdoms. Unfortunately, the numbers by which these kingdoms are designated are now almost obliterated; but I have read that, in an earlier edition than that from which this picture is taken, Finland was placed between Norway and Sweden, and the word Switzerland was printed in capitals across the Black Sea.

From geography to moral philosophy is an abrupt transition; but it is that which the student is next called upon to take. In Section CIX. he shows us an allegorical picture of life: on the left, the broad path that belongs to vice; on the right, the narrow way that is the way of virtue. "Mind, young man," he exclaims, "imitate Hercules; leave the left hand way, turn from vice, the enterance is fair, but the end is ugly and steep down. Go on the right hand, though it be thorny, no way is impassable to vertue, follow whither vertue leadeth through narrow places to stately palaces, to the tower of honour." But with characteristic caution he adds: "Take heed thou do not go too much on the right hand."

Then follow the virtues, personated by most unprepossessing female figures. Prudence, Section CVIII., like Janus, has two faces. With one she gazes in a looking-glass on things past. With the other, through a "perspective glass," she watches things to come. "She watcheth opportunity (which, having a bushy forehead, and, moreover, having wings, doth quickly slip away) and catcheth it."

Diligence is represented with a Tam-o-Shanter cap, a sickle in one hand and a rake in the other.

Temperance, which "restraineth the desire as with a bridle," is apparently pouring liquor with no unstinted hand from a bottle into a bowl, while in the background are several intemperate persons who seem to be very sick indeed.

Fortitude is a stalwart female, fully accoutered as a warrior, with a sword in one hand and a shield in the other. She leans against a pillar and seems to have just got the better of a lion, which is walking away with most dejected mien.

Patience kneels, with a lamb on one side and an anchor on the other, in the attitude of prayer, while at a little distance one very impatient person tears his hair, and another kills himself by falling on his sword.

Justice sits on a square stone, "for she ought to be immovable, with hoodwinked eyes, that she may not respect persons, stopping the left ear to be reserved for the other party," and holding in her right hand a sword to punish, a bridle to restrain, and a pair of scales to weigh.

The most amusing, however, of these allegorical representations is that of Humanity (Section CXV.). Two stout women, whom the artist makes more than usually repulsive, are embracing. Whichever is the uglier bids the other be "sweet and lovely in her countenance, gentle and civil in her behavior and manners." In the background are seen two pairs of "froward men," one pair wrestling, the other fighting a duel with swords. In the front two turtle-doves are billing and cooing, while in the extreme distance Envy, a miserable looking object, "pineth away herself."

The remainder of the book is occupied with subjects of a miscellaneous character. There is a picture of a marriage ceremony, in which the bride has a face like a hatchet, and the groom is a simpering idiot. The various degrees of relationship are shown in a "tree of consanguinity." The course of a boy's life is shown from the cradle until, with a most mournful countenance, he is seen reading a good book, and laboring with his hands. Masters and servants, the parts of a city, a court of justice, and the tormenting of malefactors—depicted with details too horrible for description—are each treated in a separate section. A ghastly picture of a burial is succeeded somewhat incongruously in Section CXXX. by a stage play. The attention of the audience is divided between the return of the prodigal son and the clown who is performing his antics and cracking his jokes. Then come various sports, such as the fencing-school, tennis, "that is the sport of noblemen to stir their bodies," dice, cards, and chess, foot-racing, and all manner of children's sports, which differ but very slightly from those that may be seen every day on our own streets.

Chapters on Warfare, that are illustrated with cuts fearfully and wonderfully made, are followed by one on Religion, which he divides into Gentileism, Judaism, Christianity, and Mohammedanism.

It is curious to observe, however, how far this good and highly intellectual man was from being able to divest himself of the superstitions of his time. In writing of God's providence, Section CXLIX., he says: "Men's states are not to be attributed to fortune or chance, or the influence of the stars," and naïvely adds, "comets, indeed, are wont to portend no good." In the picture a man is supposed to be giving his right hand to a good angel, while with his left he repels the devil, who is trying to put a noose around his neck. Behind is a witch who is drawing a circle around herself and calling upon the devil with charms. "Wo," exclaims Comenius, "to the mad wizzards and witches who give themselves to the devil; they dally with him and fall from God, for they shall receive their reward with him." Comenius was once invited to become president of Harvard College. He had passed away, however, before the horrors of the witchcraft delusion fell on New England.

After a truly shocking illustration of the Last Judgment we are again, in the last section, brought face to face with the same chubby schoolboy who started out on this strange journey through an unknown world, and the same stern schoolmaster who was his guide. "Thus," says the schoolmaster, "thou hast seen, in short, all things that can be shewed, and hast learned the chief words of the English and Latin tongue. Go on now and read other good books diligently, and thou shalt become learned, wise, and godly—*doctus, sapiens, et pius.*"

It would not be difficult to point out the faults of the "Orbis Pictus." The vocabulary is as far beyond the child's powers of memory as are much of the subject-matter and many of the terms used beyond his comprehension. In his old age Comenius himself admitted that he had attempted too much; that it is better to know a few things well than many things poorly. From his face you may clearly judge that his whole life was an exemplification of Chaucer's noble line regarding the clerk of Oxford:

"Gladly would he learn and gladly teach."

We may smile at the rude pictures, we may deplore the attempt to give an outline of all knowledge and a complete vocabulary at a single dose in one book. But we may well ask how far we have advanced since his day. There are those among us, we must confess, who still believe that the vocabulary of our own language is to be learned through a book that has all of the defects and none of the merits of the "Janua" or the "Orbis Pictus"—the modern spelling-book. We may laugh at the quaintness of many of his sentences, but let us not forget that we ourselves were required to translate into French sentences such as, "The old kitten of the young cat smiled pleasantly from the back fence of the house of the uncle of my mother's cousin." His text-books were a great advance on those he found in use. They were in advance because he followed the lead of the Baconian logic. The evolution of text-books has progressed just in proportion

as their writers have followed the laws of investigation in natural science. That such an evolution has progressed and is still progressing, there can be no doubt. The spelling-book and many other school books are but the reversions to primitive barbarism that accompany every form of evolution, whether physical, intellectual, or social.

III.

The Place of Comenius in the History of Education.

BY DR. NICHOLAS MURRAY BUTLER, COLUMBIA COLLEGE, NEW YORK.

Travelers in distant lands describe rivers which are seemingly absorbed by the sandy desert. They disappear and leave little or no trace behind them. After a time, perhaps many miles away, the stream reappears. It gathers force and volume with going, and lends its fertilizing power to the surrounding country. Even while hidden to view, it has not ceased to exist. Though the arid wastes have concealed its course, its effect has been felt beneath the surface, and here and there is a green oasis to mark its silent path. Human history is rich in analogies to this natural phenomenon, and in Comenius the history of education furnishes its example. In life he was persecuted for his religious convictions, and sought after for his educational ideas. In death he was neglected and forgotten by friends and foes alike. It could be said of him, as the Emperor Julian said of the Epicureans, he was so completely stamped out that even his books were scarce. But the great educational revival of our century, and particularly of our generation, has shed the bright light of scholarly investigation into all the dark places; and to-day, at the three hundredth anniversary of his birth, the fine old Moravian bishop is being honored wherever teachers gather together, and wherever education is the theme. We have found in Comenius the source and the forecasting of much that inspires and directs our new education.

It is difficult to project one's self back into a time when our present environment—social, political, material—was in its infancy, and when modern invention had annihilated neither time nor space. It is still more difficult to give due credit to one who at such a time saw visions and dreamed dreams that we have since realized to the full. What is commonplace to-day was genius three hundred years ago.

America was one hundred years old when Comenius was born, but the wilderness of the New World was unbroken. Neither at Jamestown nor at Plymouth had a permanent settlement been established. The Spanish Armada had just been defeated, and the future of Great Britain made

secure. Shakespeare, Spenser, Johnson, and Hooker were making Elizabethan literature. Francis Bacon was growing in power and reputation, but the climax of his career was yet to come. Copernicus had done his work; but Galileo, Kepler, and Harvey were still young men. Montaigne was dying, and Giordano Bruno was soon to be led to the stake. Luther had finished his fight, and the shock of the contest was felt in every corner of Europe. The universities were growing in numbers and influence; but Descartes and Newton, with the secrets of modern philosophy and modern science locked in their breasts, were yet unborn. It was an age of growth, of development, of rapid progress; but what we know as modern ideas and institutions only existed in their beginnings. The education of the people, true to its conservative traditions, was still shackled. Sturm, the typical schoolmaster of partisan humanism, had endeavored to escape the unsatisfactory present by anchoring the school to the newly found past. Rabelais and Montaigne had scoffed and ridiculed in vain. Something more systematic and constructive than mere literary criticism of the extravagances of humanism was necessary, if education was to be in touch with the time. The impetus to this constructive work, and many far-reaching suggestions concerning it, were given by Comenius.

His own education was belated and deficient. Before it was concluded his reflective spirit was aroused, and Comenius conceived the idea of devoting his life to making the road to learning easier to travel for those who were to come after him. This philanthropic enthusiasm was natural to him, and was fostered by the religious atmosphere in which he was born and brought up. It grew with years, and became the ruling passion of his life. At the close of his work he could say, with deepest feeling: "I can affirm from the bottom of my heart that these forty years my aim has been simple and unpretending, indifferent whether I teach or be taught, admonish or be admonished, willing to act the part of a teacher of teachers, if in anything it may be permitted me to be so, and a disciple of disciples where progress may be possible."

The intellectual development of Comenius bears traces, both in its character and its direction, of the influence of five men. These are the Holstein educational reformer, Ratich or Ratke; the Irish Jesuit, Bateus; the Italian Dominican, Campanella; the Spaniard, Vives, the friend of Erasmus; the Englishman, Francis Bacon. From Ratich he learned something of the way in which language-teaching, the whole curriculum of the time, might be reformed; and from Bateus he derived both the title and the plan of his *Janua*. Campanella suggested to him the necessity for the direct interrogation of nature if knowledge was to progress, and Vives emphasized for him from the same point of view the defects of contemporary school practice. But it was Bacon's *Instauratio Magna* that opened his eyes to the possibilities of our knowledge of nature and its place in the educational scheme. The combined influence of Co

panella, Vives, and Bacon caused him to throw off the traditional scientific methods of scholastic Aristotelianism, and to cry out for the observation and induction that have served later generations so richly. "Do we not dwell in the garden of Nature as well as the ancients?" he exclaims. "Why should we not use our eyes, ears, and noses as well as they? And why should we need other teachers than these our senses to learn to know the works of Nature? Why, say I, should we not, instead of these dead books, lay open the living book of Nature, in which there is much more to contemplate than any one can ever relate, and the contemplation of which brings much more of pleasure, as well as of profit?" These are the thoughts that underlie the text-books of Comenius and give them their value.

The early part of the seventeenth century was not a period when an aggressive and enthusiastic reformer like Comenius could work in peace anywhere in Western Europe. On the Continent the Thirty Years' War was raging with all the bitterness and cruelty that a religious motive develops. In England the struggle between the Stuarts and the people was approaching its crisis, and the modern democratic spirit was crouching for a spring. Comenius was himself a follower of John Huss, who had paid for his principles with his life, a century before. He himself and his beloved Church suffered grievously during the turmoil and anarchy of the long struggle. When Fulneck was taken by the Spaniards in 1621, Comenius lost all that was dear to him—his wife and children, his manuscripts and his library. Henceforth he was an exile, wandering over the face of the earth preaching the gospel of education. In Michelet's significant phrase, he lost his country and found the world.

Under the influence of Bacon, Comenius had advanced a stage beyond the mere desire to reform educational method and conceived a plan for a Pansophia, a vast encyclopædia of all the world's learning—Bacon's own *globus intellectualis*. His aim in this ambitious work was rather practical than speculative. To be sure, he wished to show that all departments of knowledge could be organized systematically in accordance with the new principles of method; but he was particularly anxious to husband the labors of scientific investigators all over the world, by placing in their hands an account of all that was known, and so turn their attention and energy to new and unsolved problems. To obtain suggestions for this scheme and assistance in carrying it out, Comenius entered into an extensive correspondence with the leading men of science and patrons of learning in every country of Europe.

He regarded his educational method as part of the Pansophia and an introduction to it. With feverish enthusiasm he pressed his projects upon the attention of prominent men, and became widely celebrated for his zeal, his lofty motives, and his educational propaganda. He corresponded, among others, with that modern Mæcenas, Samuel Hartlib, the friend of Milton. Together they planned for the establishment of an academy or

college to carry out the Pansophic idea and to be the center of the world's scientific advance in the future. In 1641 Comenius journeyed to London, where he found that Hartlib had made him known to Parliament, and was in high hopes of securing from the government an endowment for the work. Hartlib had paved the way so cleverly that Comenius would probably have succeeded in this, but for the political disturbances which were overshadowing everything else and rapidly plunging England into civil war. The Long Parliament had little time to think of education.

Baffled at this point, Comenius grasped at the next straw, which was an invitation to visit Sweden in the interest of his projects. This invitation came from De Geer, a wealthy Dutchman resident in Sweden, who remained a steadfast friend and patron while he lived. In Sweden Comenius was given a courteous and sympathetic hearing by Oxenstiern and the chancellor of the University of Upsala; but as practical men they advised him to subordinate his Pansophia to the more pressing reforms of school instruction. He did this under protest and only after some friction, and a number of publications bearing on methods of teaching were the fruit of his labors for the next seven or eight years. Then in 1650 he transported himself to the recesses of Hungary, in response to a request of Prince Sigismund, and spent four years in writing and organizing schools there. Of the rest of his life the greater part was passed at Amsterdam, in comparative retirement, and he died there in 1671, at the advanced age of eighty.

The Pansophia of Comenius need not be seriously considered. Whatever may have been the arguments in its favor two hundred and fifty years ago, it has no significance now. The printing press, the telegraph, the rapid and frequent communication between nations and peoples have made it unnecessary and impossible. An important scientific discovery is known in Tokio, Sydney, and Valparaiso as soon as it is announced in New York or London. The dream of Bacon and Comenius was a noteworthy one, but it is largely owing to their own influence that its fulfillment in just the form they planned it was forever postponed. The world of learning has become its own Pansophia.

The verdict of the literary historian on Comenius, as voiced by Hallam, is that he was a man of "much industry, some ingenuity, and little judgment." The student of education, however, must take another and much broader view. In tracing contemporary movements and ideas back to their sources, he finds that a surprisingly large number of them were absorbed from the progressive tendencies of the time and formulated for the school by Comenius. The elementary school course must be shortened and enriched, we say; the pupil is consuming his life in preparing for life, says Comenius. Rote-learning and mere memory-training are useless, we hear; my fundamental principle is that the understanding and the tongue should advance in parallel lines always, says Comenius. Not enough time

and care are devoted to the teaching of English, it is said; instruction in the mother-tongue must lie at the basis of all else, says Comenius. The list might be continued indefinitely. The infant school or kindergarten, female education, the incorporation of history and geography in the curriculum, the value of drawing and manual training, the fundamental importance of sense-training, the physical and the ethical elements in education, and, finally, that education is for all, and not for a favored few only, were all articles in the creed of Comenius. Yet many of them are far from being universally adopted to-day. Surely this man was a prophet!

The robust and practical character of the proposals of Comenius is most apparent when they are contrasted with the educational doctrines of those who have come after him, particularly Locke, Rousseau, Pestalozzi, and Froebel. Frail as the psychology of Comenius was, it was truer than that of Locke. He knew that the human mind was an organism, an activity, a seed with wonderful potency of growth and development, and not a mere sheet of wax, as the Englishman taught, on whose passive surface the environment merely leaves certain impressions or traces. Locke's thought was of the education of the gentleman; Comenius proclaimed that education was for the race. The single point in which Locke corrected Comenius was in exalting character, rather than knowledge, as the chief aim in education.

Of Rousseau one may say, with Mr. Quick: "His writings and the results produced by them are among the strangest things in history; and especially in matters of education it is more than doubtful if the wise man of the world Montaigne, the Christian philanthropist Comenius, or that 'slave of truth and reason' Locke, had half as much influence as this depraved serving-man." Rousseau's enthusiasm took the form of theory run mad, and the practical impossibility of his educational plans was only exceeded by their philosophical unsoundness. Comenius had been himself a teacher and an organizer of schools. He knew the practical limitations under which any theory is put when reduced to practice. He asked of the school and the pupil nothing that was impossible. He accepted society as he found it, and would teach it to reform itself. Rousseau would blow it into a million atoms and deify each.

There is nothing in the history of education so touching as the story of the life of Pestalozzi. His own immortal words, "I lived like a beggar to teach beggars to live like men," only half reveal the story of his unwearied patience, his intense suffering, his self-sacrifice for childhood. His life gave reality to his half-mystical principle that "the essential principle of education is not teaching; it is love." Yet his thought is relatively unimportant. Pestalozzi gave himself to education, but few new principles. His theory of the value of intuition needs to be carefully supplemented, and his insistence on the fact that education is develop-

ment, a drawing out and not a putting in, merely repeats the thought on which all of the work of Comenius was based. Without that principle, which Comenius had made familiar more than a century before, the work of Pestalozzi would have been of little importance in the history of education. Indeed, it would have been philanthropy merely, not education.

Nor does it detract from the estimate to be put upon Froebel's teachings to say that in almost every important particular they were built upon foundations laid by the Moravian bishop. Froebel himself is strangely deficient in masculinity and in practical capacity. His exaggerated and absurd symbolism and his unbalanced religiosity give a certain curious interest and stimulus to his doctrines, but add nothing to their force or their permanent value. His seed-thought is again that of Comenius's—educate by developing the pupil's own activity. Out of it and its corollaries the new education has grown.

The place of Comenius in the history of education, therefore, is one of commanding importance. He introduces and dominates the whole modern movement in the field of elementary and secondary education. His relation to our present teaching is similar to that held by Copernicus and Newton toward modern science, and Bacon and Descartes toward modern philosophy. Yet he was not, in a high sense, an original mind. But his spirit was essentially modern and remarkably receptive. He assimilated the ideas that were inspiring the new civilization and applied them to the school. In an age of general ignorance Comenius had an exaggerated idea of the importance of mere knowledge. This is easily understood and readily excused. Most of his educational tenets, preached with all the fervor of a Peter the Hermit, and fought for with all the determination of a Cœur de Lion, have become commonplaces. But such is their value that we do well to pause to honor the memory of him who made them so.

REPORT ON SCHOOL STATISTICS.

To the Department of Superintendence.

GENTLEMEN: Your committee, consisting of the undersigned and Messrs. James McAlister and George P. Brown, holding over from the last year, conclude their report *

* PRELIMINARY REPORT, MADE IN FEBRUARY, 1891.

GENTLEMEN: Your Committee, appointed at the last annual meeting for the purpose of considering and reporting on the subject of School Statistics, beg leave to offer the following preliminary report, setting forth the results of their studies on the subject, and postponing for another meeting, or for the work of another committee, if it be your pleasure, the completion of the details of a scheme of statistics which will afford the data required for a comparative study of domestic and foreign educational systems.

Your Committee would first call attention to the object and purpose of collection of statistics, which they conceive to be the following:

Statistics reveal the nature and efficiency of the powers and forces involved in a process. Forces and powers are revealed in their results. Their results are of little moment, if dead results, except as they indicate what the living power has been and still is. In matters of education we inquire into the aims and purposes of the educative process, and learn this by a quantitative study of the means employed and the results obtained. It is evident, therefore, at the outset, that the quantities given by our statistical tables can have no significance except in connection with the qualitative elements involved. We pass over at once from the how many to the what kind. We seek, again, new quantitative data that may indicate the quality, but we never reach quantitative data that are significant in and for themselves.

Your Committee would suggest as the four principal heads under which school statistics may be grouped:

First, Attendance of Pupils.
Second, Course of Study.
Third, Teaching Forces and Appliances.
Fourth, Support—Revenue and Expenditures.

Under these four heads they would group the following details:

I.

Statistics of attendance should answer questions like the following—
(*a*) How many?
(*b*) How long?
(*c*) Who?

That is to say: (1) How many pupils in the aggregate? (2) How many relatively to the entire population? (3) How many relatively to the population of the school age, say 5 to 21, 6 to 14, or some other period agreed upon? Then this item should be further defined in five items: (1) How many enrolled during the annual session of school? (2) How many as average belonging? (3) How many in actual average daily attendance? (4) How many were dropped and afterward readmitted? (5) The number of cases of tardiness.

Under the second item of attendance (*How long?*) we wish the number of daily school sessions for the year, and the hours of a school session, the length and hour of recesses and intermissions.

Under the third item of *Who?* we include such items as—
(1) How many of each sex?
(2) How many at each year of age, and the average age?
(3) Race.
(4) How many born in the town or State where the school is situated?
(5) How many born in other parts of the same nation?

on Statistics by offering, first, a list of the items which, in their opinion, should be collected to show the workings of a school system.

They have arranged these items in three classes. The first class includes the essential data which should be taken every year, and from all schools. This first list contains the essential and indispensable items for every annual report.

The second list contains the more important of what we may call occasional statis-

(6) How many born abroad?
(7) Occupations of parents.

II.

Under the second of our four chief heads we should ask for statistics regarding the course of study, and thus determine by this grade of schools as follows:

(*a*) Kindergarten.
(*b*) Primary and grammar school.
(*c*) Secondary education.
(*d*) Higher education.

We should ask very carefully as to the relations of these items to the first class of items, especially age, sex, and average attendance.

The primary and grammar schools are to be distinguished from the secondary schools by the following tests: The introduction of algebra, or of an ancient or modern language, marks the beginning of the secondary course of study. The higher course of study should be marked by analytic mathematics, or by logical and philosophical studies, or by advanced language studies.

III.

The third general head, "The Teaching Forces and Appliances," includes—

(1) Buildings and accommodations.
(2) Size of schools under one principal teacher (or else number of pupils per teacher).
(3) Number of teachers.
(4) Supervision.
(5) Means of training teachers.
(6) Examinations of teachers.
(7) Methods of discipline and instruction used by teachers.

IV.

The fourth general head, "The Support of Schools," includes—

(1) REVENUE. Items of.
  (*a*) Receipts from State and local taxation.
  (*b*) Receipts from funds or productive property.
  (*c*) Receipts, if any, from tuition.
(2) EXPENDITURES.
  (*a*) For teachers' salaries, including supervision.
  (*b*) Incidentals, including janitor hire, fuel, apparatus, and other current expenses.
  (*c*) Permanent investments, including building and repairs.

Your Committee would call attention to the importance of a detailed discussion of the use to be made of these several items, in studying the effective forces of educational systems, and in comparing one with another. Such discussion is not here attempted, but is suggested as a proper subject of a supplementary report. Moreover, your Committee have observed the prime necessity for such a definition of the several items as to prevent misunderstanding. A description of the best methods of keeping and tabulating the several items would also be a very useful addition to such a report.

In dealing with reports, not merely reports from a foreign country, but with reports from different sections of the United States, your Committee has been impressed with the necessity of a glossary of terms used in tabulating statistics. There should be a careful collation of all terms and designations used here and abroad, and so minute a description given of the processes of ascertaining the data under the several heads, as to leave no doubt in the mind as to the exact meaning of each. Without this accurate information there can be no satisfactory comparative study of school systems.

All of which is respectfully submitted.

W. T. HARRIS.
JAS. MACALISTER.
GEORGE P. BROWN.

tics, and should not be expected every year, perhaps, nor from all schools. A State superintendent may, for example, collect statistics one year regarding the place of nativity of pupils and parents, another year he may take occupations, and another year he may collect items regarding the preparation of the teaching force.

In our third list we have included still less essential items, which may be collected at still rarer intervals.

In the next place, we have given a tabular summary showing in detail the items actually collected in the several States of the Union, and side by side with it an exhibit of the statistical items collected in the several countries of Europe. As these details cannot be read before an audience, your committee submit the same for printing in an appendix, hoping that they will be found useful to State officers in the preparation of their forms and blanks for collecting these returns.

All of which is respectfully submitted.

W. T. HARRIS,
Chairman of Committee.

APPENDIX I.

SCHOOL STATISTICS.

I. FUNDAMENTAL ITEMS.

1. Number of children of legal school age, classified by race and sex (school population).

a, White males.
b, White females.
c, Colored males.
d, Colored females.

NOTE.—These letters, a, b, c, d, are used in these tables always to indicate race or sex as here indicated.

2. Number of pupils enrolled on the school registers (excluding duplicate registrations), classified by race and sex (a + b + c + d).

NOTE.—The plus sign (+), when used, indicates that the items between which it is placed are taken separately. Thus, a + b means that the white males and white females are given separately. Where this plus sign is omitted, the items are not given separately in the reports.

3. Average daily attendance, classified by race and sex.

4. Average length of school year (days).

5. Number of teachers, classified by race and sex.

6. Number of pupils receiving kindergarten instruction, classified by race and sex.

7. Number of pupils receiving elementary instruction (including kindergarten pupils), classified by race and sex.

8. Number of pupils receiving secondary instruction, classified by race and sex.

9. Number of students receiving higher instruction, including colleges, schools of medicine, theology, law, technology, classified by race and sex.

10. Number of students in special schools, classified by race and sex, including trade schools, evening schools of all kinds, manual training schools, schools for the defective and dependent classes, reform schools, commercial schools, and nurses' training schools.

11. Number of buildings used as schoolhouses.

12. Total seating capacity of such buildings (number of pupils that can be accommodated).

13. Value of all property used for school purposes.

14. Average monthly salaries of teachers classified by race and sex.
15. Total school revenue.
    (1) Income from productive funds and rents.
    (2) State school fund.
    (3) Local taxes.
    (4) Other sources.
16. Total expenditure.
    (1) Salaries of teachers (including supervision).
    (2) Other current expenses.
    (3) Permanent expenditure (for buildings, grounds, etc.).
17. Amount of permanent invested funds.

II. Less Essential but Desirable Items.

18. Age classification of pupils enrolled.
    (1) Number of pupils under six.
    (2) Number of pupils between six and seven, etc.
    * * * * * * * *
    (11) Number of pupils between fifteen and sixteen.
    (12) Number of pupils over sixteen.
19. Number of cases of tardiness.
20. (1) Number of pupils born within the State.
    (2) " " " " in other States.
    (3) " " " " in foreign countries.
21. Occupations of parents.
    (1) Agents.
    (2) Bankers and brokers.
    (3) Clerks and salesmen.
    (4) Domestic servants and waiters.
    (5) Draymen and teamsters.
    (6) Farmers.
    (7) Factory and mill operatives.
    (8) Hotel and boarding-house keepers.
    (9) Laborers (unskilled).
    (10) Manufacturers.
    (11) Mariners and boatmen.
    (12) Mechanics and artisans.
    (13) Miners and quarrymen.
    (14) Merchants, traders, and dealers.
    (15) Professionals.
    (16) Public officials and employés.
    (17) Railroad employés.
    (18) Seamstresses.
    (19) Saloon-keepers and barteńders.
    (20) Unclassified.
22. Average number belonging, including temporary absentees.
23. Number of pupils in each branch of study.
24. (1) Average age of kindergarten pupils.
    (2) " " " elementary pupils.
    (3) " " " secondary pupils.
    (4) " " " higher pupils.
    (5) " " " special pupils.

25. (1) Number of normal schools.
(2) Enrollment in normal department.
(3) Average attendance.
(4) Number of teachers.
(5) Expenses.

III. Occasional Items.

26. (1) Number of teachers who have taught less than two years.
(2) " from two to five years.
(3) " over five years.
27. (1) Number of applicants for teachers' certificates.
(2) " who are certified.
28. (1) Number of teachers graduates of normal schools.
(2) " " " " " universities and colleges.
(3) " " " " " high schools, academies, etc.
(4) " " " who have received only an elementary education.
29. Number of pupils dropped and readmitted in the course of the year.
30. " " hours in each school session.
31. Length of recesses or intermissions, and time of beginning.
32. Number of cases of corporal punishment.
33. " " pupils promoted to next higher grade.

APPENDIX II.

An exhibit showing which of the essential items enumerated in Appendix I. are reported by the several States of the Union and by leading foreign nations.

Note.—Acknowledgment is here made by the Committee to Mr. F. E. Upton, of the Bureau of Education, for valuable assistance in the compilation of this and the following appendices.—W. T. H.

I. The United States.

Alabama.—1. ab+cd (enumeration made on alternate years). 2. ab+cd. 3. ab+cd. 4. ab+cd. 5. a+b+c+d. 14. ab+cd. 15. (1)+(2)+(4); (3) is imperfectly given. 16. (1) and (3) are only reported in city districts. 23. 25.

Arizona.—1. ab. 2. a+b. 3. ab. 4. 5. a+b. 13. 14. a+b. 15. 16. 22.

Arkansas.—1. a+b+c+d. 2. a+b+c+d. 5. ac+bd. 11. 13. 14. ac+bd. 15. 16.

California.—1. a+b+c+d. 2. a+b. 3. ab. 4. 5. a+b. 7. 8. 11. 13. 15. 16. 22. 25. 27. 28.

Colorado.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 7. 8. 11. 12. 13. 14. a+b. 15. 16.

Connecticut.—1. ab. 2. ab. 3. ab. 4. 5. a+b. 6. 11. 12. 13. 14. a+b. 15. 16. 26.

Delaware.—1. a+b. 2. a+b. 3. 4. 5. a+b. 13. 14. a+b. 15. 16. 23. ab.

District of Columbia.—2. a+b+c+d. 3. ab+cd. 4. 5. a+b+c+d. 6. 7. 8. 10. 14. ab+cd. 15. 16. 22. 25. (1) (2) (3) (4).

Florida.—2. a+b+c+d. 3. ab+cd. 4. 5. a+b+c+d. 11. 13. 14. 15. 16. 23.

GEORGIA.—2. a+b+c+d. 3. ab+cd. 5. a+b+c+d. 7. 8. 15. 16. 23.
IDAHO.—2. a+b. 4. 5. a+b. 15. 16.
ILLINOIS.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 8. a+b. 11. 13. 14. a+b. 15. 16. 17. 25. (1) (2) (3) (4) (5). 27.
INDIANA.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 25.
IOWA.—1. a+b. 2. ab. 3. ab. 4. 5. a+b. 14. a+b. 15. 16. 26. (1) (2). 27. (1) (2).
KANSAS.—1. ac+bd. 2. ac+bd. 3. ac+bd. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 27.
KENTUCKY.—1. a+b+c+d. 2. a+b+c+d. 3. a+b+c+d. 4. 5. a+b+c+d. 7. 8. 11. 13. 14. a+b+c+d. 15. 16. 23. (1) (4). 25. 26. (1). 27. (1) (2). 28. (1).
LOUISIANA.—2. a+b+c+d. 3. ab+cd. 4. 5. a+b+c+d. 11. 14. a+b+c+d. 15. 16.
MAINE.—1. ab. 2. ab. 3. ab. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 23.
MARYLAND.—2. a+b+c+d. 3. ab+cd. 4. 5. a+b+c+d. 11. 15. 16. 23.
MASSACHUSETTS.—1. ab. 2. ab. 3. ab. 4. 5. a+b. 8. 14. a+b. 15. 16. 22. 25. 28. (1).
MICHIGAN.—1. a+b. 2. a+b. 4. 5. 11. 12. 13. 15. 16.
MINNESOTA.—1. ab. 2. ab. 3. ab. 4. 5. a+b. 11. 13. 14. a+b. 16. 28. (1) (2) (3).
MISSISSIPPI.—1. a+b+c+d. 2. a+b+c+d. 3. a+b+c+d. 4. 5. a+b+c+d. 11. 13. 14. a+b+c+d. 15. 16. 27. (1) (2).
MISSOURI.—1. a+b+c+d. 2. a+b+c+d. 3. 5. 12. 13. 14. 15. 16. 27. b. 28. (1).
MONTANA.—1. a+b. 2. ab. 3. ab. 4. 5. a+b. 11. 13. 15. 16. 28. (1).
NEBRASKA.—1. ac+bd. 2. ac+bd. 3. abcd. 4. 5. ac+bd. 7. 8. 11. 13. 15. 16. 18. 27. (1) (2).
NEVADA.—1. ab+cd. 2. ac+bd. 3. a+b+c+d. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 22. 26. (1).
NEW HAMPSHIRE.—2. a+b. 3. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 22. 26. (1).
NEW JERSEY.—1. abcd. 2. abcd. 3. abcd. 4. 5. ac+bd. 11. 12. 13. 14. ac+bd. 15. 16. 18. 27. (1) (2).
NEW MEXICO.—1. a+b. 2. a+b. 3. a+b. 4. 5. a+b. 15. 16.
NEW YORK.—1. ab. 2. ab. 3. ab. 4. 5. a+b. 11. 13. 14. 15. 16. 27. (1) (2).
NORTH CAROLINA.—1. a+b+c+d. 2. a+b+c+d. 3. abcd. 4. 5. abcd. 15. 16. 23.
NORTH DAKOTA.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 7. 8. 11. 13. 14. a+b. 15. 16. 23.
OHIO.—1. a+b. 2. ac+bd. 3. ac+bd. 4. 5. a+b. 7. 8. 11. 13. 14. a+b. 15. 16. 23.
OREGON.—1. a+b. 2. a+b. 3. a+b. 4. 5. a+b. 11. 13. 14. a+b. 15. 16. 23. 27. (1) (2).
PENNSYLVANIA.—1 ab. 2. a+b. 3. ab. 4. 5. a+b. 11. 12. 13. 14. a+b. 16. 26. (1) (4). 27. (1) (2). 28. (1) (2) (3).
RHODE ISLAND.—1. ab. 2. a+b. 3. ab. 4. 5. a+b. 11. 13. 15. 16. 23.
SOUTH CAROLINA.—2. a+b+c+d. 3. a+b+c+d. 4. 5. a+b+c+d. 11. 13. 14. ac+bd. 15. 16. 23.
SOUTH DAKOTA.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 11. 12. 13. 14. a+b. 15. 16. 23. 27. (1) (2).
TENNESSEE.—1. a+b+c+d. 2. a+b+c+d. 3. ac+bd. 4. 5. a+b+c+d. 11. 13. 14. a+b+c+d. 15. 16. 23.

TEXAS.—2. a+b+c+d. 4. 5. ac+bd. 11. 12. 13. 14. a+b+c+d. 15. 16. 17. 23. 28. (1) (2).

UTAH.—1. a+b. 2. a+b. 3. ab. 4. 5. a+b. 13. 14. a+b. 15. 16. 23.

VERMONT.—1. a+b. 2. a+b. 4. 5. a+b. 7. 8. 13. 14. a+b. 15. 16. 18. 23.

VIRGINIA.—1. a+b+c+d. 2. a+b+c+d. 3. a+b+c+d. 4. 5. a+b+c+d. 8. ab+cd. 11. 12. ab+cd. 13. 14. ac+bd. 15. 16. 18. 24. 25. 27. (1) (2).

WASHINGTON.—1. a+b. 2. a+b. 3. a+b. 4. 5. a+b. 7. 8. 11. 12. 13. 14. a+b. 15. 16. 27. (1) (2).

WEST VIRGINIA.—2. a+b+c+d. 3. a+b+c+d. 4. 5. a+b+c+d. 11. 13. 15. 16. 23. 27.

WISCONSIN.—1. a+b. 2. a+b. 4. 5. a+b. 11. 12. 13. 14. a+b. 15. 16.

II. FOREIGN COUNTRIES.

CANADA—ENGLAND.—1. ab. 2. a+b. 3. a+b. 4. 5. a+b. 6. a+b. 7. a+b. 12. 14. a+b (yearly). 15. 16. 18. ab (a+b in some cities). 23. 25. 26 (in some cities). 27. 28.

SCOTLAND.—1. ab. 2. a+b. 3. a+b. 4. 5. a+b. 6. a+b. 7. a+b. 8. a+b. 12. 14. a+b (average annual salary). 15. 16. 18. ab. 23. 25. 27. 28.

FRANCE.—1. a+b. 2. a+b. 4. 5. a+b. 6. a+b. 7. a+b. 8. a+b. 9. ab. 10. ab. 11. 14. 15. 16. 18. 21 (Paris). 25. 28. 30. 31.

ITALY.—1. ab. 2. a+b. 4 (by months). 5. a+b. 6. ab (reports infant schools which include Froebelian methods and a few kindergartens in the largest cities). 7. a+b. 8. a+b. 9. ab. 10. a+b. 11. 14. a+b (reports maximum and minimum annual salary). 15. 16. 25. a+b. 27. a+b (reports numbers certified). 28. a+b (reports graduates of normals). 30. 31.

NETHERLANDS.—1. ab. 2. a+b. 5. a+b. 7. a+b (kindergartens not included). 8 a+b. 9. a+b. 10. a+b. 11. 14. ab (reports maximum and minimum annual salary). 15. 16. 23. a+b. 25. a+b. 27. a+b. 28. a+b (reports graduates of normals). 33. ab.

SPAIN.—1. ab. 2. a+b. 3. a+b. 5. a+b. 7. a+b (kindergartens not included). 8. a+b. 9 (in part). 10 (in part). 11. 14. a+b (reports maximum and minimum aanual salary). 15. 16. 25. a+b. 27. ab (reports numbers certified, and those certificated). 28. ab (reports graduates with normal certificates). 30. 31.

NORWAY.—1. ab. 2. a+b. 4 (reports number of weeks). 5. a+b. 7. a+b. (kindergartens not included). 8. a+b. 9. ab. 15. 16. 25. ab. 28. ab (reports graduates of normal schools and academies). 30. 31.

SWEDEN.—1. ab. 2. a+b. 4 (by weeks). 5. a+b. 7. a+b. (kindergartens not included). 8. a+b. 9. ab. 10 a+b. 11. 14. a+b (reports maximum and minimum annual salary). 15. 16. 18. ab. 23. ab (reports per cent. of pupils in each branch in secondary schools). 25. a+b (reports separate schools for the sexes). 30. 31. 33. ab.

RUSSIA.—1. ab. 2. a+b. 5. ab. 7. a+b (kindergartens not included). 8. a+b. 9. a+b. 10. a+b. 15. 16. 25. a+b.

PRUSSIA.—1. a+b. 2. a+b (every third year). 4. 5. a+b. 7. a+b. 8. a+b. 9. ab. 11. 15. 16. 17 (every third year). 25. 27. 28. 30.

SAXONY.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 9. ab. 10. ab. 11. 15. 16. 17 (every third year). 25. 27. 28. 30.

WÜRTEMBERG.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 9. ab. 10. ab. 11. 15. 16. 17 (only partially). 25. 27. 28. 30.

HAMBURG.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 10. ab. 11. 15. 16. 17. 25. 27. 28.
BREMEN.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 10. ab. 11. 15. 16. 25. 27. 28.
LUBECK.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 10. ab. 11. 15. 16. 25. 27. 28.
AUSTRIA.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 9. ab. 10. 11. 25. 27. 28. 30.
HUNGARY.—1. a+b. 2. a+b. 4. 5. a+b. 6. a+b. 7. a+b. 8. a+b. 9. ab. 10. ab. 11. 15. 16. 17. 25. 27. 28. 30.
SWITZERLAND.—1. a+b. 2. a+b. 4. 5. a+b. 7. a+b. 8. a+b. 9. a+b. 10. ab. 11. 15. 16. 25. 27. 28. 30.

APPENDIX III.

Giving the definitions of certain technical terms used in educational reports, together with their equivalents in certain foreign countries.

TECHNICAL TERMS USED IN EDUCATION—DEFINITIONS AND FOREIGN EQUIVALENTS.

1 (a). *School age.*—Age at which children are permitted free attendance at the public schools. This age varies in the different States, but 6 to 21 may be considered the representative school age in this country, being designed evidently to embrace all minors old enough to render school instruction advisable and profitable to them. The children of school age in each State, whatever that age may be, collectively constitute the *school population* of such State.

NOTE.—There are, in the foreign countries considered in this vocabulary, no terms corresponding in significance to "school age" and "school population," as understood in the United States. In a popular sense, however, as used in literature everywhere, "school age" includes the period of life from the age of four or five years to adult age, as the epoch most suitable for schooling.

1 (b). *Compulsory school age.*—The age at which children are obliged by law to attend school in those States of the Union having compulsory school laws. This age also varies in the several States, but 8 to 14 may be considered as the representative. The children subject to a compulsory school law constitute the "compulsory school population" of a State.

Eng. *Age for school attendance.*
Ger. *Schulpflichtige Alter.*
Fr. *Âge scolaire.*
It. *Obbligo di frequentare la scuola.*
Sp. *Edad escolar.*

NOTE.—The compulsory school age in the foreign countries considered above varies, but 6 to 13 may be regarded as typical. All the children subject to compulsory school laws in England and France, and the major part of those in Germany, are allowed free instruction at public schools.

1 (c). *School population.* See 1 (a) and note.

1 (d). *Compulsory school population.* For definition see 1 (b).
Eng. *Population of school age.*
Ger. *Schulpflichtige Kinder.*
Fr. *Enfants d'âge scolaire;* or, *Nombre d'enfants à instruire.*
It. *Popolazione da 6 a 12 anni.*

2. *Enrollment.*—Number of different pupils enrolled (or entered) on the school registers during any given year; or, in other words, the entire number of different pupils who have attended at any time during the year.

Eng. *Number of children (or scholars) on registers.*
Ger. *Zahl der Eingeschriebenen.*
Fr. *Nombre des inscrits.*
It. *Numero degli iscritti.*
Sp. *Número de niños concurrentes* (or *inscriptos*).

3 (a). *Attendance.*—Number of pupils present (on any given day or at any given time).

Eng. *Attendance.*
Ger. *Frequenz,* determined on two test-days (*Stichtage*) each year.
Fr. *Fréquentation,* or *Élèves présents,* determined as in Germany.
Sp. *Asistencia.*

3 (b). *Average attendance.*—Average number of pupils attending each day or session.

Eng. *Average attendance.*
Sp. *Asistencia media.*

4 (a). *School year.*—(1) The year, or period of twelve months, for which school officials are elected, appropriations of money made, teachers hired, school reports made, etc., though the annual epoch of some of these features sometimes dates from a different day than that of others. In the United States the school year usually begins the first of July, or some other day during the summer vacation. The term is sometimes restricted to (2) that portion of the school year during which the schools are in actual session.

Eng. *School year.* "A year or other period for which an annual parliamentary grant is . . . paid or payable." It "is the year ending with the last day of the month preceding that fixed for the inspectors' annual visit." —Ed. Acts Man., 17 ed., p. 375.
Ger. *Schuljahr.*
Fr. *Année scolaire.*
It. *Anno scolastico.*

4 (b). *Length of school year.*—The number of days, weeks, or months the schools were in actual session during the school year. The expressions "length of schools," "duration of schools," "length of school term," etc., are also used. The *average length of the school year* is the average of a group of schools in which the number of days of session varies. As in most foreign governmental school systems the number of days is nearly uniform, this latter term has little application outside the United States.

Eng. *Number of times school has kept.* This must be divided by two to get the number of days.
Ger. *Dauer des Schuljahres.*
Fr. *Durée de l'année scolaire.*

5. *Teacher.*—An instructor in an elementary or secondary school.

Eng. *Schoolmaster, schoolmistress, teacher.*
Ger. *Lehrer, Lehrerin.*
Fr. *Maître, maîtresse, instituteur, institutrice.*
It. *Insegnánte, maestro, maestra.*
Sp. *Maestro, maestra.*

6. *Kindergarten.*—A school for young children, from about three to six years, conducted after the methods of Froebel.

Eng. *Infant school, or class.*
Ger. *Kindergarten.*
Fr. *École maternelle.*
It. *Asili d'infancia.*

7. *Elementary instruction.*—Instruction in the first principles or rudiments of knowledge, including chiefly reading, writing, spelling, arithmetic, grammar, geography, United States history, and often the outlines of natural history and science, the pupil being prepared by this course to enter upon algebra and Latin or some modern language. Usually in the United States the first eight years of a fully graded public school course mark the period of elementary instruction, taking the child at the age of about 6 years. *Elementary schools* are schools in which elementary instruction is the sole or predominating feature. These in a fully graded course may be subdivided into *primary schools* (first four years) and *grammar* (or *intermediate*) *schools* (second four years). Kindergarten instruction is also classed as elementary.

Eng. *Elementary instruction.*
Ger. *Elementar-Unterricht.*
Fr. *Enseignement primaire* (excluding the "primaire supérieur").
It. *Istruzione elementare.*
Sp. *Enseñanza primaria.*

8. *Secondary instruction.*—This is supposed to begin the ninth year of the course of study, and to take up algebra, geometry, natural philosophy, physical geography, Latin, Greek, French, and German, for some or all pupils, and for a whole or a part of the four years; also an outline study of universal history, English literature, and some of the special natural sciences, as geology, human physiology, botany, etc. A *secondary school* is a school whose ultimate object is to give a secondary education, and which may or may not have a preparatory course of elementary grade, or pupils pursuing elementary studies.

Eng. *Secondary* (or *intermediate*) *instruction.* The term "secondary schools" in England is applied to certain groups of schools designed for the education of the upper and middle classes, including *endowed grammar* (*i.e.*, classical) *schools, endowed non-classical schools, private schools,* and *proprietary schools.* These are also known as *middle class schools.* They receive pupils at about the age of 8, continue them in their elementary studies, and carry them along to an age varying from 14 to 19, giving them an education in some cases higher, in others—especially in the "private" schools—not so high as is indicated by the term secondary in the United States. The nine great *public schools* of England (Eton, Harrow, etc.), which are properly "intermediate" schools—*i. e.*, standing between preparatory primary schools or private tutors, and the "Universities"—receive pupils from 10 to 15, and are of higher grade than most of the secondary schools of the United States. *Higher board schools* have developed in some of the large cities, and correspond nearly to our public secondary schools (high schools), giving to the children of their people an opportunity to continue their education beyond the elementary grade. About 80,000 pupils pursue high school subjects in elementary schools.

Ger. *Höhere Unterricht* (*i. e.*, higher than that given in the Volksschulen).

Fr. *Enseignement primaire supérieur.* The instruction given in the *Division de grammaire* of *lycées* and *collèges communaux* also belongs here.

It. *Istruzione secondaria.*

9. *Higher* (or *superior*) *instruction.*—This is supposed to take the fourth epoch of four years in a complete course of education, secondary taking the third four years, and elementary education the first eight years. By topics and methods, the higher education is distinguished by taking mathematics in those branches which succeed plane geometry and elementary algebra ; Latin and Greek writers that require more maturity of reflection to master, such as Horace, Livy, Tacitus, Juvenal, Cicero's moral essays, Homer, Demosthenes, Plato, Æschylus, Sophocles, Euripides, Aristotle ; physics treated by mathematics ; rhetoric ; mental philosophy ; the philosophy of history. In general, the studies of higher education are conducted on a comparative method—with the purpose of treating each theme in the light of all branches of knowledge. A *higher institution* of learning is one whose ultimate object is to give a higher education, and which therefore may or may not have a preparatory department in which instruction is given in secondary or even elementary branches.

Eng. *University instruction ; collegiate instruction.*
Ger. *Hochschulunterricht.*
Fr. *Enseignement supérieur.* The last three years of the *enseignement secondaire* is also of the higher grade according to the United States standard.
It. *Istruzione superiore.*
Sp. *Enseñanza universitaria.*

10 (a). *Special schools.*—Schools of elementary or secondary grade which (1) educate for some special trade, business, or occupation (*e. g.*, commercial colleges, art schools) ; or (2) educate some special class of persons (*e. g.*, deaf-mutes, juvenile delinquents).

10 (b). *Evening schools.*—A class of special schools, generally public and located at the centers of population, designed to give evening instruction in elementary and sometimes in secondary branches, general and technical, to persons whose occupation, age, or both, prevent them from attending the day schools. A special feature of evening schools in some cities of the United States is the instruction of foreigners in the English language.

Eng. *Evening schools.*
Fr. *Classes d'adultes.* (Held in the evening or on Sunday.)
It. *Scuole serali.*

10 (c). *Evening high schools. Continuation schools.*—A class of evening schools designed more particularly to give some degree of secondary education to youths who are obliged to go to work after finishing their elementary education in the day schools.

Ger. *Fortbildungsschulen.* (Evenings or Sundays.)

11. *Schoolhouse.*—A building used for school purposes, one in which instruction is given.

Eng. *School building.*
Ger. *Schulhaus.*
Fr. *Maison d'école.*
It. *Edificio-scolastico. Locale per le scuole.*
Sp. *Casa de escuela.*

12. *Number of sittings for study,* excluding those used only for recitation purposes.

Eng. *Accommodation, number of seats.* Includes all seats, being total seating capacity.

13. *School property.*—All property, real and personal, belonging to a school system (*i. e.*, not hired or rented), and designed to be used for school purposes, including school sites and buildings, furniture, libraries, apparatus, etc.

Eng. *School buildings, premises, and furnishing.*
Ger. *Schul-Eigenthum.*
Fr. *Bâtiments et matériaux scolaires.*

14. *Salary* (or *wages*) *of teachers.*—The sum paid to teachers weekly, monthly, or annually, as compensation for their services. In computing the *average monthly salaries* of any group of teachers, weekly and annual salaries must be reduced to a monthly basis.

Eng. *Salary.*
Ger. *Gehalt.*
Fr. *Traitement.*
It. *Onorario stipendio.*
Sp. *Sueldos.*

15 (a). *Revenue* (school).—Money from any source received for school purposes.

Eng. *Income.*
Ger. *Einnahmen.*
Fr. *Ressource.*
It. *Rendita.*
Sp. *Ingresos.*

15 (b). *State* (school) *tax.*—A uniform tax levied on all the property or polls of a State, the proceeds whereof is apportioned to the counties, towns, or school districts, generally according to school population or average attendance.

Eng. *Rates.*
Ger. *Staats-Steuern.*

15 (c). *Local* (school) *taxes.*—County, town, and school-district taxes for school purposes.

Eng. *Rates.*
Ger. *Orts-* (or *Municipal-*) *Steuern.*
Fr. *Centimes additionels*, or *spéciaux.*
It. *Tasse communale e provinciale.*
Sp. *Fondos provinciales, comunales, y municipales.*

15. (d). *Revenue from permanent funds.*—The interest on invested funds, including rent of school lands, if any.

Eng. *Income from endowment.*
Ger. *Interessen angelegter Fonds.*
Fr. *Produit des legs et dons.*
Sp. *Ingresos de los donativos y legados.*

16 (a). *Expenditure* (school).—Money expended for school purposes.

Eng. *Expenditure.*
Ger. *Ausgaben.*
Fr. *Dépenses.*
It. *Spese generali.*
Sp. *Gastos.*

16 (b). *Amount paid to teachers* (for salaries), including salaries of superintendents.

Eng. *Teachers' salaries.*
Ger. *Ausgaben für Gehalte.*
Fr. *Traitements.*
It. *Stipendi; rimunerazioni ed indemnita al personale.*
Sp. *Obligaciones del personal.*

16 (c). *Other current expenditure* in addition to amount paid to teachers; *i.e.*, incidental or miscellaneous expenditure for the maintenance of the schools and care of school buildings, including, among other things, fuel, lighting, janitors, incidental repairs, free text-books if any, and stationery, cost of administration, rent of hired buildings, etc. Foreign countries do not conform to this classification, but the analogous foreign terms are as follows:

Eng. *Miscellaneous expenditure.*
Ger. *Andere Ausgaben.*
Fr. *Dépenses diverses.*

16 (d). *Permanent expenditure.*—Expenditure for school buildings (including permanent repairs), grounds, furniture, libraries, and lasting apparatus.

Eng. *Capital charges.*
Ger. *Bankosten.*
Fr. *Dépenses de construction.*
It. *Sussidi per construzione e riparazione di edifici scolastici.*

17. *Permanent funds.*—Value of funds and other property yielding an annual revenue for school purposes.

Eng. *Endowment.*
Ger. *Fonds.*
Fr. *Dons et legs.*
Sp. *Donativos, legados, y mandos.*

19. *Tardy.*—Late in arriving at school.

Eng. *Not punctual.*
Ger. *Zuspätkommend.*
Fr. *En retard.*

22. *Average number belonging* to a school, or system of schools, includes temporary absentees. Pupils absent for sickness or other cause, but with intention of returning to school, are considered as "belonging." This number differs from the number "enrolled" (see 2), inasmuch as the latter contains all different pupils who have attended at any time during the year, some of whom may have been dropped from the roll of those "belonging," on account of death, removal from the district, protracted sickness, entrance on business, etc.

25. *Normal school.*—A school designed for the professional training of persons intending to become teachers, usually maintained by a State or city.

Eng. *Training college.*
Ger. *Lehrer-Seminar.*
Fr. *École normale.*
It. *Scuela normale.*
Sp. *Escuela normale.*

27. *Certificate; license* (to teach).—A formal testimony of ability to teach, or permission to teach, awarded as the result of satisfactory examination before an examining board, or after having successfully completed a certain prescribed course of study, or given other evidence of capacity to teach.

Eng. *Certificate.*
Ger. *Zeugniss; Reifezeugniss; Licenz.*
Fr. *Titre* (or *brevet*) *de capacité; certificat d'aptitude pédagogique.*
It. *Diplôma d'abilitazione* (or *d'idoneita*).
Sp. *Certificado de aptitud.*

28 (a). *University.*—An institution for higher education, having as its nucleus a college in which the so-called liberal arts are taught in a course of three or four years for the degree of A.B., and in addition one or more departments for the learned professions, medicine, law, or divinity—or it may be for advanced or post-graduate work, along any lines of learning or investigation. In England the university unites several colleges.

Eng. *University.*
Ger. *Universität.*
Fr. *Faculté. Université* is the term very generally employed for the Paris "facultés."
It. *Universita.*
Sp. *Universidad.*

28 (b). *College.*—Strictly speaking, an institution of higher education, usually with a four years' course completing preparation for the degree of A.B. The word college is also used in connection with a descriptive word to designate other species of higher education, as, "Agricultural College," "Medical College."

Eng. *College.*
Ger. *Gymnasium.*
Fr. *Lycée; collége communal* (*de plein exercice*)
It. *Ginnasio; liceo.*
Sp. *Instituto; colegio.*

28 (c). *High school.*—A public secondary school.

Eng. *Higher board school.*
Ger. *Höhere Schule.*
Fr. *École primaire supérieure.*

28 (d). *Academy; institute; seminary.*—Names given indifferently to private secondary schools. "Institute" is occasionally applied to schools of higher grade.

Eng. *Grammar school; high school; institute; public school,* etc.
Fr. *Établissement libre d'enseignement secondaire; établissement laïque; établissement ecclésiastique; petit seminaire.*

30. *Session.*—A sitting of a school, or assembly of the pupils for recitations, exercises, and studies, continuing from the time the school is called to order until the pupils are dismissed beyond the teachers' jurisdiction. There are generally either one or two sessions each day.

Eng. *Meeting of the school.*
Ger. *Schulstunde,*

31. *Recess; intermission.*—Brief suspensions of school exercises, recurring periodically each day, for recreation, meals, or some other purpose. In public elementary schools holding sessions from nine to twelve A.M., and from one to four P.M., two recesses of fifteen minutes each take place, the first at or near the hour of 10.30 A.M., and the second at or near the hour of 2.30 P.M. The noon hour for dinner is not called a "recess," but usually an "intermission."

Ger. *Freiviertelstunde.*
Fr. *Récréations; sortie de midi.*

32. *Corporal punishment.*—Punishment inflicted upon a pupil's person, generally with a rod, cane, or ruler, but including a variety of other punishments in which bodily pain is caused. Other punishments, to be discriminated from corporal, are such as are based on the sense of honor, such as deprivation from privileges of the school, confinement after school hours, requirement to sit or stand in some unusual place, enrollment on a list of disgraced pupils, etc.

33 (a). *Promotion.*—Advancement from any grade to the next higher.

Eng. *Advance to higher standard.*
Ger. *Versetzung.*
Fr. *Avancement; montée d'une classe.*

33 (b). *Grade; class.*—The body or group of pupils having the same degree of advancement, pursuing the same studies, etc.

Eng. *Standard.*
Ger. *Klasse.*
Fr. *Classe.*
It. *Classe; grado.*
Sp. *Celas; grado.*



